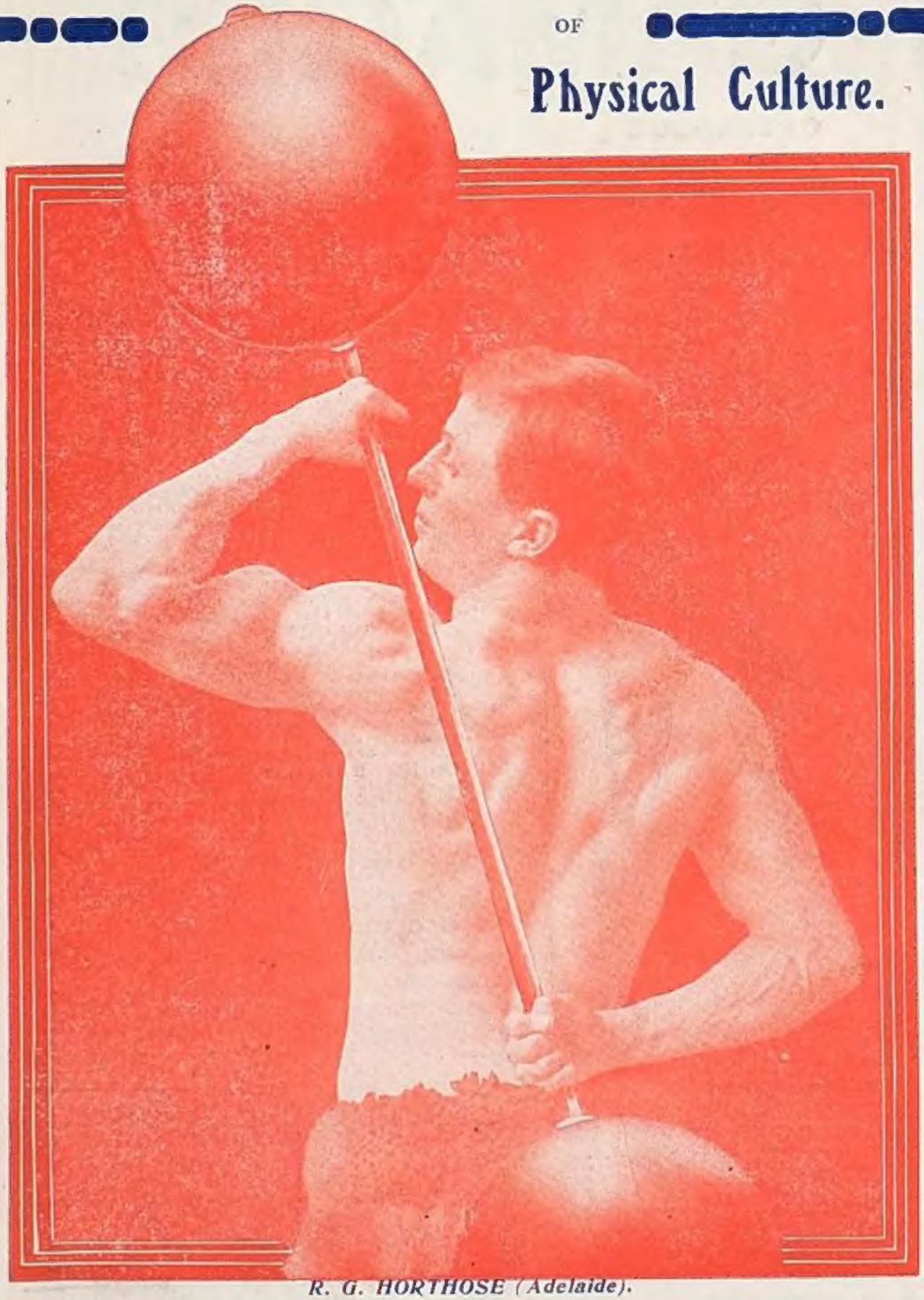
SANDOW'S MAGAZINE

OF

Physical Culture.



R. G. HORTHOSE (Adelaide).

2d.

Vol. XVII. No. 2.

NOVEMBER 22, 1906.

Digitized by Google

GAMAGES.

CATALOGUE POST FREE.

Everything for Boxing and Physical Culture.

London's Leading House.

BOXING GLOVES.—The "Holborn." A well made Glove in Buff Chamois, with finger grip. **4/6** set. Postage 4d.

Gamage's Famous "Referee" (Regd.).—Differs from all other Gloves in the following respects: The formation of the Glove is so arranged that the padding is brought over from the back of the hand to the inside of the fingers, passing over the tips of the same, and extending to above the second joints. The thumb is padded in the same manner.

ADVANTAGES: The fingers being protected by the padding, all danger of the injuries so often caused by the unprotected fingers is entirely avoided. Extra Fine Gold Cape, Ventilated, very strong. Men's, **11/9** per set; Youths', **10/9.** Postage, 4d.

AMERICAN GLOVES (Imported Direct).

No. 4A. Men's Green Kid Gloves, filled with best horse hair, laced palm and wrist, and patent bar grip **10/6**

No. 99. Finest selected Tan Glove, Kid, very superior finish, with laced palm and wrist, and patent bar grip **21/-**

No. 41. 5 oz. or 8 oz. Men's Green Selected Kid Gloves, filled with best hair, laced palm and wrist, patent bar grip with side pads and padded wrist ... ... **18/6** Postage free.

See Catalogues for further makes.

PUNCHING BALLS.—The "Referee" (Regd.) straps from ceiling to floor. A ball necessitating quick work. Selected Sheepskin Cases, hand sewn welted seams, rubber spring, stout straps top and bottom. Best red bladder. No. 5, 28 in., **16/6**; No. 6, 30 in., **19/6**; No. 7, 32 in., **21/6**; No. 8, 34 in., **25/-**; No. 9, 36 in., **28/6.** Cheaper qualities: No. 5, **10/6** and **13/6.** Larger sizes, **17/6.**

The "Army" Ball, the best for hard work. Grained Cowhide, with strap and swivel for fitting to board above striker's head. No. 6, **12/9**; No. 8, **15/-.**

INDIAN CLUBS (Champagne shaped).—The pair weighing

1 lb., per pair, Oiled ..	8d.	Polished, 10½d.
2 lbs ,, ,, ..	11d.	,, 1/1½d.
3 lbs. ,, ,, ..	1/1	,, 1/4½d.

Over above weights, Oiled, 4d. lb. Polished, 4½d. lb. Postage 4d. lb., 2lbs. 6d.

DUMB BELLS.—Best quality, Black, Ball Heads, made to weights.

	1 lb. & under	2 lbs.	3 lbs.	4 lbs.	6lbs.	8 lbs.
Unpolished per pair ..	10d.	1/-	1/4	1/9	2/6	3/-
Polished	1/-	1/3	1/9	2/2	3/-	3/9

Postage, 4d. lb., 2 lbs. 5d., 3 lbs. 6d.

BOXING KNICKERS—Sateen, elastic round waist, taped seams, full legs. Boys', 22 in. to 28 in. waist, **1/2.** Men's sizes, **1/3.** Wool cashmere, all colours, **2/11.** China silk, to order, **18/6.** Cotton web breeches, in navy, black, or white, **3/-**

VESTS.—White gauze, with short or no sleeves, **1/-.** White cellular sleeveless, **2/-.** Extra stout white wool, short sleeves, **1/6** and **2/6.**

Ordinary Iron Dumb Bells, 1½d. lb. Carriage extra. Leather Covered Handles. **3d.** lb.

SHOT LOADING DUMB BELLS.

Size. in.	Weight empty. lbs.	Weight when full. lbs.	Price.
6	30	50	**12/6**
7	40	80	**15/-**
8	56	130	**18/-**
9	64	180	**21/-**
10	76	250	**27/-**
12	110	400	**35/-**

ALL SANDOW'S SPECIALITIES IN STOCK.

For Gymnastic Apparatus of all kinds :: ::

See Catalogue. Post free.

A. W. GAMAGE, Ltd., HOLBORN, LONDON, E.C.; & VICTORIA RD., ALDERSHOT.

BODLEIAN 21·1·1907 LIBRARY

Digitized by Google

GARRUD'S Scientific

Anglo-Japanese School & Institute.

Sole Address:— (Dept. S.)

7, FEATHERSTONE BUILDINGS, HOLBORN, LONDON, W.C.

(Close to Chancery Lane Tube Station.)

NOW is the best time to join, YOU cannot do without

JU-JUTSU

If you want to be SUCCESSFUL, and if you want to enjoy LIFE to the full either when at business or pleasure. None of your business compeers or your companions in pleasure will play tricks on you if you know a little of the wonderful Japanese Art. Ju-Jutsu is a self-defence, a physical culture and the best game imaginable rolled into ONE. No one can learn it better or quicker than at Garrud's School. If you will send a penny stamp I will send you, per return, full particulars as to how you can learn this Science personally or by Correspondence. The first **TWO Correspondence Lessons** will be forwarded, post free, for **twelve penny stamps.** DO NOT MISTAKE THE ADDRESS.

Subscription Form.

Date _____

To THE MANAGER,

"SANDOW'S MAGAZINE," 131, TEMPLE CHAMBERS, LONDON, E.C.

Please send "SANDOW'S MAGAZINE" *for* *one year,* / *six months,* *Post Free, beginning with the* _____ *number, for which I enclose* 10s. 6d. / 5s. 6d.

Name _____

Postal Address _____

_____

VARICOSE VEINS.

A Rational Cure!

By a Practical and Inexpensive Treatment.

SOUND ADVICE how to obtain PERMANENT RELIEF.

Price **2/6** *post free.*

No further expense necessary.

Apply SANDOW'S MAGAZINE CO.,
131, Temple Chambers, Temple Avenue, E.C.

Digitized by Google

The EVERY DAY

Series of Publications.

1 Exercise and Training
2 Baths and Bathing
3 Health in Schools
4 The Skin and its Troubles
5 How to make the Best of Life
6 Nerves and Nerve-Troubles
7 The Sight and how to preserve it
8 Premature Death, its Promotion or Prevention
9 Change as a Restorative
10 Gentle Art of Nursing the Sick
11 Care of Infants and Children
12 Invalid Feeding, with Hints on Diet
13 Every-day Ailments, and how to treat them
14 Sleep and Sleeplessness
15 The Story of Life
16 How to do Business. A Manual of Practical Affairs
17 How to behave. A Pocket Manual of Etiquette
18 How to Write
19 How to Debate. With Hints on Public Speaking
20 Don't: Directions for avoiding Improprieties in Conduct
21 The Parental Don't: Warnings to Parents
22 Why Smoke and Drink?
23 Elocution
24 The Secret of a Clear Head
25 Common Mind Troubles
26 The Secret of a Good Memory
27 Youth: Its Care and Culture
28 The Heart and its Function
29 Personal Appearances in Health and Disease
30 Alcohol: Its Use and Abuse

In Parchment Covers, 6d. each.
POSTAGE 2d. EXTRA.
3 Copies assorted, POST FREE.
Apply Sandow's Magazine, Book Dept., 131, Temple Chambers, London, E.C.

THE ATHLETE'S LIBRARY.

MUSCLE BUILDING.
By Dr. L. H. Gulick. A complete treatise on the correct method of acquiring muscular strength. Illustrated with numerous full page engravings.

HOW TO WRESTLE.
Edited by F. R. Toombs, and devoted to special poses and illustrations by George Hackenschmidt, the "Russian Lion." It shows the champion in many poses, and contains a special article on "Training," in which he gives good advice to beginners. Besides showing accurately how to secure each hold and fall, the book also contains interesting articles on training, and the official rules for all styles of wrestling.

JIU JITSU.
A complete description of this famous Japanese system of self-defence. Each move thoroughly explained and illustrated with numerous full page pictures of Messrs. A. Minami and K. Koyama, two famous exponents of the art of Jiu Jitsu, who posed for this book.

DUMB-BELLS.
By G. Bojus. The book contains 200 photographs of all the various exercises, with the instructions in large, readable type. It should be in the hands of every teacher and pupil of physical culture, and is invaluable for home exercise as well.

HOW TO RUN 100 YARDS.
By J. W. Morton, 100 yards British champion and 100 and 120 yards Canadian champion. Written with the express purpose of initiating novices into the mysteries of a good style, and tended to improve the sprinting of short distance runners. His own success demonstrates the value of his instructions. Fully illustrated with photographs of the author in action.

HOW TO PUNCH THE BAG.
By Young Corbett. The best treatise on bag punching ever printed. Each variety of blow used in training is shown and explained. The pictures comprise thirty-three full page reproductions of Young Corbett as he appears while at work in his training quarters. Fancy bag punching is treated by a well known theatrical bag puncher.

BOXING GUIDE.
This book contains over seventy pages of illustrations showing all the latest blows, posed especially for this book under the supervision of a well known instructor of boxing, who makes a specialty of teaching and knows how to impart his knowledge. They are so arranged that anyone can easily become proficient.

TEN MINUTES' EXERCISE FOR BUSY MEN.
By Dr. Luther Halsey Gulick. Anyone who is looking for a concise and complete course of physical education at home would do well to procure a copy of this book. Ten minutes' work as directed is exercise anyone can follow. It already has had a large sale, and has been highly commended by all who have followed its instructions. Nearly 100 pages of illustrations and 100 of text.

TENSING EXERCISES.
By Prof. E. B. Warner. The "Tensing" or "Resisting" system of muscular exercise is the most thorough, the most complete, the most satisfactory, and the most fascinating of systems. The illustrations comprise nearly seventy photographs explanatory of the text, rendering it extremely easy for anyone to follow the directions without trouble.

PHYSICAL TRAINING SIMPLIFIED.
By Prof. E. B. Warman. It is a complete, thorough and practical book where the whole man is considered—brain and body. By following the instructions no apparatus is required. The book is adapted for both sexes. The exercises comprise directions as follows:—How to stand; how to sit; how to rest; breathing. Fully Illustrated.

Each of the above books is complete in itself and replete with valuable blocks that enable anyone to follow out the instructions given.

PRICE 7½d. EACH, POST FREE.

Apply SANDOW'S MAGAZINE (Book Dept.),
131, Temple Chambers, London, E.C.

Digitized by Google

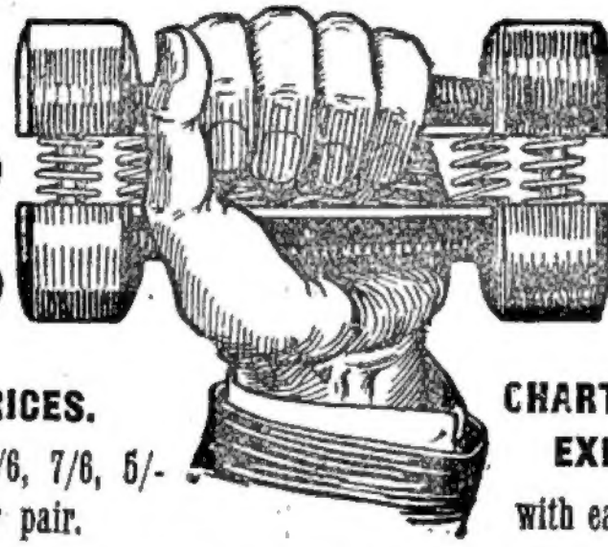
SANDOW'S

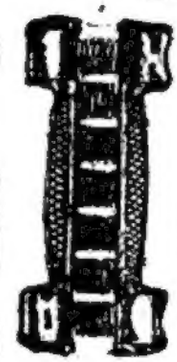
SPRING GRIP

FOR MEN & BOYS.

FOR LADIES & GIRLS.

DUMB BELLS





PRICES.

12/6, 10/6, 7/6, 6/-
per pair.

CHART OF EXERCISES
with each pair.

THIS APPLIANCE IS VERY SIMPLE, and cannot get out of order. It consists of a Dumb-bell made in two halves, separated about 1 inch from one another, the intervening space being occupied by small steel springs, which may be of any strength, and easily removable to vary the resistance.

When exercising, the springs are compressed by gripping the Bells, and bringing the two halves close together, in which position they are kept until the exercise is over. They are suitable for all ages.

The pupil who possesses these Bells will find that instead of having to be continually buying heavier dumb-bells, **One pair will suffice him for all time.** All that it will be necessary for him to do will be to purchase, at a small expense, new springs from time to time. All pupils are advised to use the **"Grip" Dumb-bell,** upon the merits of which I need not enlarge.

I have always taught that muscle is developed **by will-power,** not by mechanical movement, and the simple principle of this latest invention is, by calling forth a **continual Exercise of will-power, to obtain results impossible with any previous Dumb-bell.**

Yours faithfully, EUGEN SANDOW.

The Dumb-bells can be had from Athletic Outfitters, Sporting Goods Dealers, and our Agents throughout the World, as well as direct from The

Sandow's Grip Dumb-bell Co.

SANDOW HALL, SAVOY ST., LONDON, W.C.

THE LAST WORD ON JU-JUTSU

By RAKU UYENISHI.

A Text Book of Instruction useful alike to the **Novice** and the **Experienced Exponent.** Over 40 Half Tone Illustrations. 14 Cinematograph Illustrations. The Cinematograph Illustrations show every movement of the fall. **Price 2/6,** postage 3d. extra.

Apply **SANDOW'S MAGAZINE** (Book Dept.)
131, Temple Chambers, E.C.

Heavy Weight Champion of England, etc.

The most practical handbook on the Noble Art, by the most expert English exponent of the day. Included is an interesting chapter on how to stop a hooligan or rough if attacked in the street.

Price 1/-, postage 2d. extra.

Apply **SANDOW'S MAGAZINE** (Book Dept.)
131, Temple Chambers, E.C.

VOL. XVI. **Sandow's Magazine**

Now Ready.

Price 6/6 Post Free.

Apply—

SANDOW'S MAGAZINE, 131, Temple Chambers, London, E.C.

ALSO IN STOCK—

Vols. I., VIII., IX., X., XI., XIII., XIV.,

Price 6/6 Post Free.

Vols. II., III., IV.,

Special Quotations on application.

Digitized by Google

CONTENTS.

	PAGE.
NOTES FROM MY NOTE-BOOK. By THE EDITOR	641
WHEN DO WE DEVELOP MOST GROWTH? By DR. A. E. GARLAND ...	643
PHYSICAL AIDS TO NIGHT WORKERS. By HENRY E. BROWN	646
THE ACTION OF MEDICINE AND THE POWER OF NATURE. By B. S. HARTMAN, M.D.	647
CHARACTER BUILDING THROUGH THOUGHT	649
EXERCISE WITH DISCRETION. By "GERALDUS"	651
TOMMY ATKINS, JUNR.	653
HOW DO YOU USE YOUR ENERGY?	655
WEED OUT THE UNFIT. By PROFESSOR FLINDERS PETRIE, F.R.S.	657
IN THE ARENA OF SPORT	660
MICROBE MANIA. By GEORGE W. CAREY	662
READERS' CLUB	663
CLUBS, CLASSES AND SOCIETIES	665
"SANDOWISM." By P. H. ROUSE	666
THE NATURAL HISTORY OF THE SLUM CHILD	668
ASKED AND ANSWERED	671

Military Hair Brushes.

A good hair Brush is a necessity. Brisk brushing (more easily done with the Military Pattern Brush), removes scurf from the scalp and invigorates the growth of the hair.

We have now in stock a splendid line in these goods, consisting of Two Brushes, best bristles, satinwood backs splendidly finished, in strong leather case.

Price, **3/6**

Per Pair, post free.

Apply SANDOW'S MAGAZINE (Appliances Dept.), 131, Temple Chambers, London, E.C.

DELICIOUS COFFEE.

RED WHITE & BLUE

For Breakfast and after Dinner.

Digitized by Google

Prof. S. K. RakuUyenishi

(JU-JUTSU CHAMPION OF THE WORLD),

Instructor to the Army Gymnastic Staff at the Headquarter's Gymnasium, Aldershot;

GIVES
PERSONAL INSTRUCTION
— IN —

JU-JUTSU

(Japanese Self-Defence).

Instruction by POST may be obtained by special arrangement with "The Manager."

At Homes, Garden Parties, Displays, etc., attended.

English and Japanese Teachers supplied to Schools, Colleges, Gymnasia, etc.

Special Methods of Defence Taught to Ladies.

The now world famous art of how to quickly and easily overcome an assailant or assailants.

Daily from 2.30 to 9.30. Other times by arrangement.

31, GOLDEN SQUARE, PICCADILLY CIRCUS, W.

Call or write for particulars and terms.

All communications should be addressed to "The Manager."

TRICKS AND TESTS OF MUSCLES.

Over sixty tests explained. These not only provide amusement but provide an excellent method of obtaining complete

Control over the Muscular System.

PRICE 1/2 POST FREE.

Apply—

SANDOW'S MAGAZINE (Book Dept.),
131, Temple Chambers, E.C.

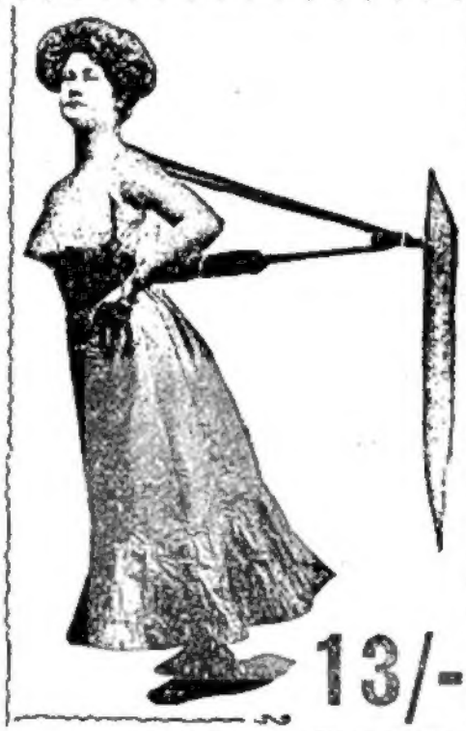
The SYMMETRION.

This Machine is **not** designed to create **muscular development, but** produce **symmetry of form.**

No woman who values a good appearance should be without this appliance. Its principle feature is that it accomplishes the improvements with a minimum of exertion.

The chart which accompanies the "Symmetrion" shows certain simple movements. They are specially arranged in groups to—

Remove double chins,
Correct scraggy necks,
Fill out salt cellars,
Create graceful, well padded shoulders,
Develop the bust,
Make the waist slim,
Improve the hips,
Shape the Calves, and
Strengthen the ankles.



Each Machine is neatly packed in box, and contains full instructions as to use.

13/-

POST FREE.

APPLY— —:— **SANDOW'S MAGAZINE (Appliances Department), 131, Temple Chambers, London, E.C.**

Digitized by Google

(Est. 1898). VOL. XVII. No. 21. NOVEMBER 22, 1906.

SANDOW'S MAGAZINE

... OF ...

PHYSICAL CULTURE

EDITOR: EUGEN SANDOW.

MOTTO:—*Mens Sana in Corpore Sano*—A SOUND MIND IN A SOUND BODY.

NOTICES.

ADDRESS.—131, Temple Chambers, Temple Avenue, London, E.C.

Telephone: 3436 Central.

NOTICE.—Business Letters should be addressed to the Manager, Editorial Letters to the Editor. Cheques, Money Orders, and P.O.s should be crossed "London and South Western Bank."

PUBLISHING DAY.—Every Thursday.

SUBSCRIPTION.—Annual Subscription, 9s.; Half-year, 5s.; Quarter, 2s.

NOTICE TO CONTRIBUTORS.—The Editor will at all times be glad to consider Articles, Stories, and Sketches, but in order to avoid waste of time, contributors would do well to submit suggestions for his approval before sending in their work. In no case can the Editor be responsible for the safety of unsolicited sketches and literary matter, but where stamps are enclosed he will do his best to secure their return if unsuitable.

NOTES FROM MY NOTE-BOOK.

BY THE EDITOR.

I HAVE time and again advocated the teaching of physiology and hygiene in the school as a part of physical education, and it is satisfactory, therefore, to note that medical men have come into line with this view. The antiquated arguments against what has been called "the vulgarisation of knowledge" have long since been exploded, and the new view of an intelligent acquaintance with the construction of one's own body taken their place. As one member of the deputation which recently waited upon the Minister of Education said, surely it is foolish to teach children to read novelettes without first teaching them to understand their own bodies. Physical education in the school must include the teaching of hygiene, anatomy and physiology, or otherwise it will be imperfect.

IT is interesting to note the names of those who formed the deputation above referred to. There is now evidently none of the proverbial difference of opinion between the most distinguished members of the medical profession on this subject, and such an array of medical talent must carry considerable weight with the educational authority. The names of Sir T. Lauder Brunton, Sir Victor Horsley, Sir Thomas Barlow, Dr. Langley Browne, Dr. Clifford Allbutt, Dr. G. A. Heron, and Dr. James Niven, are those standing very high in various departments of medical science, and Mr. Birrell could not fail to be impressed with the unanimity of such distinguished specialists on this subject. His reply will be read with pleasure by everyone interested in natural physical education.

HE agreed, he said, with their views almost *in toto*. Their aim must be to introduce the teaching of hygiene and temperance into the general science teaching. The new code had attempted

Digitized by Google

to begin that by inserting health and temperance under the head of moral instruction. They must avoid technicalities, avoid the jargon of physiology, and make the children see that health and temperance could be taught in simple language without repulsive and long words. He understood that the principles of health and temperance were already taught in training colleges, and he agreed that those colleges should be visited if possible by skilled medical lecturers.

DOCTOR'S SENSIBLE SUGGESTION.

At the meeting of the Ancoats Healthy Homes Society in the New Islington Hall recently, Dr. Niven, medical officer of health for Manchester, gave an address on "Consumption." He said it had often been referred to as the "great white plague." It levied a tremendous toll upon all white people, but was not only peculiar to Europeans. It was estimated that the disease cut off one-seventh of the whole human race. Speaking particularly of Manchester, he said that the various parts of the city were very unequally affected. In Ancoats, for instance, the ravages of consumption were very alarming, the death-rate from this cause being more than double what it was in the whole of South Manchester, and three times more than in the Cheetham district. "Speaking generally," Dr. Niven said, "it may be accepted that as the poverty of a district increases so does the death-rate from consumption. Of course, poverty usually implies bad houses, over-crowding in lodging and other houses, and ignorance of the laws of health." The deaths from consumption, due to over-crowding, in Angel Meadow, had reached the terrible rate of twenty per thousand of the persons living in such conditions—a death-rate from this one disease exceeding the rate for the whole of Manchester last year.

Dr. Niven emphasised the need of school children being taught the laws of health. "Not only should they be taught physical exercises," he said, "they should also receive instruction in the principles of hygiene. What is the use of being able to read cheap novelettes if you have not the slightest knowledge of the construction of your own body?" He insisted that the principles of cleanliness, the careful choice of foods, and the proper cooking of them should form an indispensable part of the instruction in public elementary schools.

MUSCLE ALWAYS WINS.

At an exhibition given by the Middlesbrough Amateur Gymnastic Club, Sir Samuel Sadler declared that if he had to fight the world again, and was forced to choose between a good lot of brains and a good lot of muscle, then he would select the latter, for experience had taught him that in the long run the man with the greatest muscular strength, always provided he lived a temperate life, came out top dog. Sir Samuel said that in large communities, and more especially in large industrial centres, the great desideratum of muscle was undoubtedly too often neglected in the hurry to attain a position of power through the exercise of brains. Personally, he made a practice of walking seven miles per diem, or of taking other equivalent exercises. If people wanted to look young in spite of advancing years, then his advice to them was to take plenty of exercise. Some people say they have not the time to indulge in exercise, but the day would come when they would have to take time to be ill. When he saw people suffering from "swelled stomachs," and sometimes from "swelled heads," and sometimes from the torments of dyspepsia, he could not help but think what a great deal better they might have been had they only practised those exercises, and cultivated those conditions of life which were the aim of the Middlesbrough Institution.

AS YOU WERE.

If we imagine, as we sometimes do, that after an illness or disease from which we have recovered we are as before, we are grievously mistaken. No disturbance of the normal course of the functions can pass away and leave things just as they were. A permanent damage is done, not immediately appreciable, it may be, but still there, and, along with other such items which Nature in her strict account keeping never drops, it will tell against us to the inevitable shortening of our days. Through the accumulation of small injuries it is that constitutions break down long before their time.—*Health.*

TO THOSE WHO DARE.

Here's to the man who says "I can,"
  And holds his head uplifted,
And isn't afraid to take a dare
  From the ones who are higher gifted;
Who never regrets and never forgets
  The lessons he's learned thro' failing,
And uses them all for stepping stones
  To attain the crest of his calling.

Here's to the woman who says "I will,"
  Regardless of what befalls her,
And doesn't despair at her load of care
  Or the road thro' which fate calls her;
Who leans to the cross in her heavy loss,
  And finds, what e'er her station,
That the sweet and pure are the things that make
  Her the noblest of God's creation.

Digitized by Google

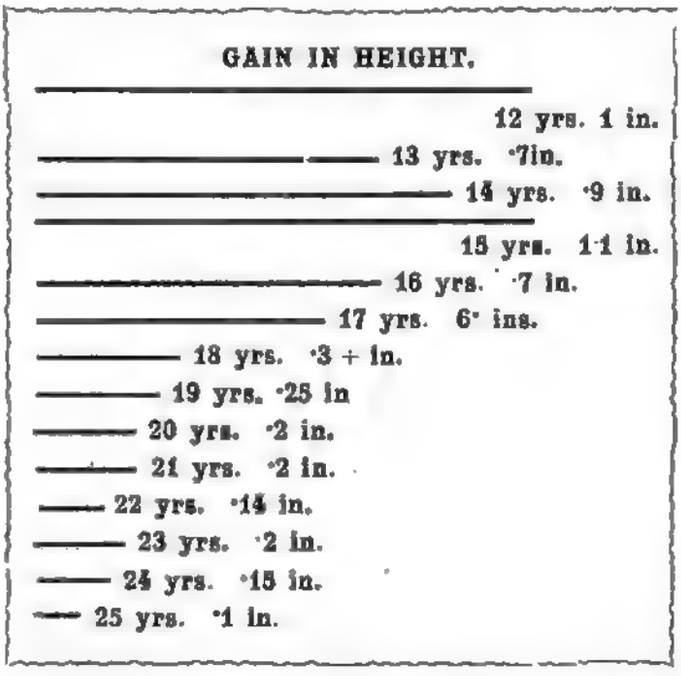
WHEN DO WE DEVELOP MOST GROWTH?

The Mind and Body Develop Together.

By Dr. A. E. GARLAND.

ONE who has studied the period of human adolescence must be convinced of the magnificent possibilities of work for the individual at that period of life. Physically, mentally and spiritually, he is at the all-important stage of his existence. The doorway of life is just opening to him, and he is on the threshold of vast possibilities which must depend to a very large extent upon his physical attainments.

In order that we might have some important facts before us graphically, I have prepared a number of charts from the data obtained from the measurements of individuals who have been measured twice or more times. These charts were made by the individualising method. The first chart shows the gain in height. It will be noticed that the apex comes at fifteen years of age. There is a sudden rise to that age and then a sudden decline to twenty.



It is interesting to note that the statistics compiled by Dr. Frank Boaz show the apex at the same age. Dr. Boaz has used the generalising method; that is, he has taken the measurements of a large number of individuals and has found the average of each age. His method of compilation would naturally show a greater increase in inches than the method used in preparing the other charts used here. The individualising method is more accurate, as by this means we compare the same individuals.

Dr. Henry G. Beyer, U.S. Navy, has given some interesting facts from the compiled measurements of students at Annapolis Naval Academy who took regular exercise and those who did not. These charts show practically the same results. The gain of those who did not take regular exercise is 1 1/5 inches at sixteen years, exactly the same as in my chart taken of schoolboys. In all these charts the greatest gain in height is between the ages of twelve and seventeen.

The second series of charts show the gain in weight in pounds. Here the apex is at sixteen years and not at fifteen, when we would naturally look for it. Dr. Boaz shows the same apex. As we have these two methods of compilation agreeing in this way, we can say, without a question of doubt, that at fifteen years we have the greatest increase in height, while at sixteen, we have the greatest increase in weight, and that between the ages of twelve and seventeen the greatest increase in both height and weight occurs.

The third chart shows the gain in girth. Here the total gain in girth measurement of each boy was taken, and compiled according to the age. This shows the apex at fifteen and sixteen years, with the greatest increase at sixteen, the same as in weight, showing that at sixteen the weight is due to the increase in girth or the period of filling out. The gradual increase to sixteen

and decline to nineteen, with the rise at twenty and twenty-four, is worthy of note, as the development contest held for several years was won twice by individuals at the age of twenty-four, and once each at the age of twenty, twenty-one and nineteen. This should not, however, affect the result of the chart, as the large number of other measurements would offset the individual standing.

The fourth series of charts show the gain in strength. They are made from the total of the strength tests and are represented in pounds. They show a gradual increase at sixteen, and a gradual decline with the greatest gains between sixteen and nineteen. The chart made on the generalising method shows the same apex with the largest increase at sixteen.

The fifth chart shows the gain in lung capacity. Here we have the apex at eighteen, whereas all the other charts show the apex at fifteen or sixteen. This would seem to prove that the growth of lungs did not keep pace with the rapidly growing muscular and osseous systems.

The last chart shows the ages at which occur the greatest percentage of conversions, and agrees very accurately with the investigations of Edwin D. Starbuck. It is a singular fact that the apex of the chart is at sixteen years, with the largest percentages between the ages of twelve and nineteen, showing that conversion is confined almost exclusively to the adolescent. Another important fact to note is that the period of greatest religious awakening is at the same age as the greatest gain in muscular development, strength, and weight.

With girls the same general increase of growth is apparent, except that the greatest gain is between the ages of nine and fourteen.

If we believe Dr. William T. Porter's investigation, showing that the largest, heaviest and strongest boys are as a rule the brightest and most advanced in their studies, we must conclude that to a greater or lesser extent the mind and body develop together, and knowing as we do, the influence of judicious exercise on growth and development, we must be convinced of the great value of proper physical exercise for the youth.

The boy between the ages of twelve and seventeen is not only acquiring the greatest increase in height, weight, and growth, but the frame is being moulded; the carriage secured; the muscles, nerves, heart, lungs, and vital organs developed to meet the demands of the rapidly growing frame, so that too much emphasis cannot be placed upon this important phase of physical education.

The spiritual aspect of this period must appeal to every thoughtful person. Habits formed at this time in life are particularly difficult to overcome. When we consider, as Carlyle says: "Habit is the deepest law of human nature," and Foster says: "In the great majority of things habit is a greater plague than ever afflicted Egypt; in religious character it is a grand felicity," the importance of establishing right habits at this time should be appreciated. It is the time when the boy's emotional nature is being awakened; when he admires and loves with an ardent devotion, and when his sex life brings him face to face with strong temptations. Physical exercise and games are especially attractive now, and the boy can be interested and engaged by these forms of amusements as by no other. This fact is being recognised by the churches, so that we see springing up in every quarter, the little church gymnasiums to hold and interest the young people.

Regular graded exercise should be the *regime* of all physical education for the adolescent. The work should consist of exercise to develop muscular strength, as this is attained to a great extent before the age of twenty. The development of muscular size and power by a reasonable amount of attention being given to this line of exercise is essential to a boy's best good, especially at sixteen and over.

The developing of the heart and lungs and increasing blood pressure would indicate that attention be given to exercise of endurance, depending upon the age of the boy. Great care and oversight should, however, be given in order that the exercise shall not be carried

GAIN IN GIRTH.

12 yrs. 10·1 in.
13 yrs. 8·75 in.
14 yrs. 13 in.
15 yrs. 14·8 in.
16 yrs. 15·7 in.
17 yrs. 13·6 in.
18 yrs. 12·5 in.
19 yrs. ·9 in.
20 yrs. 13 in.
21 yrs. 9in.
22 yrs. 6·6 in.
23 yrs. 8 ins.
24 yrs. 10·4 in.
25 yrs. 6·1 in.

beyond the amount that can be tolerated. Many cases of strained hearts that have come under my notice, have been caused by injudicious exercises of endurance. The same precaution must pertain to exercises of strength, because of the increased blood pressure at this age. Therefore, all contest work for boys before the age of seventeen should consist mainly of exercises of agility and speed. Contests of strength and long distance running should have no place in the work of those at the age of puberty.

The grouping or grading of the adolescent is essential to the best results. The most satisfactory age for grouping is 12 to 14, 14 to 17, 17 to 20, these groups being graded according to size and ability. Compulsory examinations should be insisted upon because of possible deformities, which can be corrected by prescribed exercise. The school life has a decided tendency towards occasioning round and uneven

GAIN IN LUNG CAPACITY.

12 yrs. 15 cu. in.
13 yrs. 10·8 cu. in.
14 yrs. 15·4 cu. in.
15 yrs. 20·3 cu. in.
16 yrs. 15·6 cu. in.
17 yrs. 25·2 cu. in.
18 yrs. 40 cu. in.
19 yrs. 10·4 cu. in.

shoulders, flat chests, torticollis, and the beginning of spinal curvature. Some of the other reasons for compulsory examinations are that cases of hernia and like lesions may exist without the knowledge of the youth or his parents. In one instance, out of 185 boys examined in one year six cases of hernia were found.

The opportunity afforded for personal purity and heart to heart talks cannot be over estimated.

Every normal individual must meet the temptations of life and come out victorious if he would be all he should. Parents do not talk frankly to their children about the most important matter of life:—boys and girls are left to find out for themselves. As a result, they usually learn the wrong from their companions and grievous errors result. The great safeguard against impurity is intelligence. Someone has said: "Virtue based on intelligence is far safer than innocence based on ignorance."

If we do not tell those who come under our care the truth others will tell them the untruth. Action makes it very clear that it is the duty of all who are interested in the education of youth to give their charges some warning or intimation of their danger.

In closing, let me say that in my opinion the work for and with the adolescent is the most fascinating and attractive field in the entire range of physical education. No work will pay better dividends; no labour yield grander results.

NOT FOR NOVICES.

PHYSICAL AIDS TO NIGHT WORKERS.

By Henry E. Brown.

So many are the difficulties with which persons who are obliged to tackle night work at all manner of trades and professions have to contend, with regard to physical development and leading an hygienic life, and so rare is the advice extended to this much neglected class of physical culturists that I am necessarily compelled to pen this article.

It is well known that in country places the vegetable kingdom exhumes enormous quantities of certain poisonous vapours at night that have been absorbed during the day under the stimulating rays of the sun, but in the town the presence of this is entirely absent, although we know that as the daylight wanes so the air proportionately gets colder and rawer and gradually looses its power of retaining moisture, so instinctively at night we button up, while aristocratic gentlemen never fail to grasp those glorious opportunities of paying delicate attention to their lady friends in evening dress, by fetching the wraps necessary to shield them from the chill of advancing night, while doctors never fail to impress upon their asthmatical and bronchitis patients the necessity of avoiding night air. However, our advanced health and physical culturist will laugh such ideas to scorn, especially campers.

The lot of those who "work-a-nights" is far from enviable, although the wonderful and tireless energies of Napoleon frequently had recourse to night work. The night worker as a rule is pale, hollow cheeked, and nearly always feels bottled up, owing to his lungs and digestive organs being out of condition. He sorely misses the stimulating rays of light and warmth from the sun, the warm yet pure air of the daytime. His eyes are languid and ache terribly owing to the strain of artificial light. His meals are not taken with daytime regularity, but haphazardly.

To counteract such effects the night worker must individually exercise at such a time that suits his own convenience and inclination, as no hard and fast rules can be abided by in his case. Fresh air, sound sleep, mild exercise, and digestible food is plainly essential to the night worker. It is I think the rule to have a tepid bath on leaving work, five or ten minutes exercise with dumb bells, expander or developer, according to inclination, then a meal, usually similar to breakfast. Some then have a walk, or a cycle ride, or if they have a garden do a bit of gardening, which I may say is a splendid outdoor exercise, getting plenty of fresh air, sun, and exercise for the stomach and digestive organs as well as other parts of the body, then indulge in seven or eight hours sound sleep. On rising, the exercise of the morning is repeated or varied according to inclination, and a meal similar to dinner is usually partaken of before again going to work.

Some while at work use one set of muscles more than another, so that when exercising, those muscles which have been dormant during work must be used and receive unstinted attention in order to obtain a symmetrical development. The desire for sleep naturally has disappeared during the day (night workers must sleep during the day), owing to noise and din of day traffic, but if after work he spent plenty of time in the open air, his sleep I venture to think will be of a sound character owing to utter fatigue, as fresh air naturally affects night workers in proportion more than day workers. His diet requires more care and selection than otherwise, which must be of a digestible character, according to each individual taste.

On the average each night worker has a night off the same as each day worker, which it would be wise to utilise as a night of rest and sweet slumber to counteract the unnatural and debilitating effects of night work.

Anger is a symptom of weakness, not strength. The one who gets mad is either trying to defend a weak cause, or else is weak himself.

THE ACTION OF MEDICINE AND THE POWER OF NATURE.

By B. S. Hartman, M.D.

BY taking a sharp, thin bladed knife and cutting a cornstalk three-quarters through and immediately bringing the two cut edges together and wrapping it with a bandage, securing the stalk to a stake to prevent the edges from being separated by the wind, and leaving it in this condition for forty-eight hours, the cut will have united permanently, not requiring either the bandage or the stick any longer. In five or six days a close inspection will not reveal this cut.

There having been no medicine used, the cure or healing was effected wholly by Nature.

Forty-seven years ago the writer planted a beautiful, symmetrical little Norway maple in front of his office. Two years elapsed, and a more perfect little tree than it was could not be imagined. A horse nipped at the tree one day, and removed the bark for fully three-quarters of the circumference around the tree, and in length about five inches.

Everyone that saw it felt sure that the tree would have to perish, that there could be no hopes for its restoration. No medicine or other material was applied to the sore or roots or the leaves. The owner had made up his mind that the tree was doomed to die.

In a year, however, it was noticed that all around the edge of the space from which the bark had been removed it had been rounded over and looked quite healthy, but the outer layer of wood which had been uncovered by the horse was dead. In another year the rounded edges had grown considerably over the wound, and it was self-evident then that it would only be a matter of time until the wound would be covered over by a new growth. In five years it was entirely grown over, and a mere scar remained visible, and in ten years even the scar had entirely disappeared, and to-day, after forty-seven years, it is large and quite symmetrical.

This is another example of the power of Nature.

* * * *

A merchant seated at the breakfast table, complained to his wife that he had a headache, a bitter taste in his mouth, and altogether felt miserable and ate but little. His wife urged him to stop to see the doctor on his way to the store, and he promised to do so.

In the evening about five o'clock he returned home and asked his wife how soon dinner would be ready, that he had had no luncheon. She remembered that he had eaten but little breakfast, and answered that she would see to it that dinner would be ready very shortly.

When they sat down to the table, his wife asked him how he felt now.

"I never felt better in my life, and I am quite hungry."

"What did the doctor say was wrong with you?"

"The doctor? I saw no doctor."

"But, you remember, I said you should call on him because you felt so ill."

"Oh, my! I had forgotten all about that. The fact of the matter is, wifey, I had to meet a big bill at the bank before three o'clock, and, knowing it, I rushed to the store, got a lot of accounts ready, sent my clerk out in one direction and I went in another, and, although the two of us worked very hard all day, just fifteen minutes before the bank closed we deposited enough cheques and money to meet the bill. And the consequence is, I do not only feel hungry, but I feel well, nothing wrong with me whatever."

The merchant had taken no medicine, either internally or externally, but in his eagerness to meet his pressing obligation he forgot all about the bad feelings he had in the morning. Nature, the *vis mediatrix Naturæ*, was his physician. But for the forces of Nature no living creature could recover when injured or sick.

In all trivial affections, and in many serious affections, the forces of Nature not only tend to preserve the health of the individual, but also to improve it by throwing off the diseased action and bringing it back to its normal condition.

The action of Nature is constant. It acts from the time the organism is forming to the time it dies. It is the constant protector of the individual. There is never a moment nor a long period of time but what it is in full action.

But sometimes it is desirable to do something more for the patient than what Nature is doing, and this is the moment in which the greatest intelligence must be used. It is evident that whatever is administered to the individual as an assistant to Nature, the physician must know beyond every possibility of a doubt that the proposed medicine will coincide with the forces of Nature. And hence, he must be equally sure that the medicine will not coincide with the diseased action in the body. If the medicine given will coincide with the action of Nature, the patient will surely improve, but if, on the other hand, the medicine will coincide with the diseased action, then the patient will unavoidably get worse.

While every physician knows that this is true in the action of medicine, yet ninety-nine out of a hundred, when they prescribe for a patient, forget all about this principle and they blindly give anything that has come from high medical authority, whether it will coincide with the one or the other principle, and the consequence is that the mortality of to-day is twice as great as it would be if no medicine at all were given, or if all medicines were given in strict accordance with the principles above laid down.

There are hundreds of physicians who practise medicine to-day who practically never give any medicine, and the reason that they do not is because they find it impossible to know on which side of Nature it will act. But there are men in the profession who arrogate to themselves the knowledge requisite to treat a patient in safety and will give any amount of poison—arsenic, strychnine, corrosive sublimate, sedatives, etc., and feel sure that they will coincide with the powers of Nature and benefit the patient. And remember, it is not only necessary that they know that it will coincide with the powers of Nature, but they must know it beyond every possibility of a doubt, and surely to know so positively, the physician must be one of extraordinary powers, must have knowledge that not one man in a hundred thousand possesses. But each physician is sure—perfectly sure—that he is that particular one, of that gigantic nature and deeply penetrating knowledge, and they go ahead with impunity.

Of course, this pretension of great knowledge and penetrating sagacity is all a bluff. Not only do physicians not have these discriminating powers, but no one else has them, and the consequence must be that the giving of medicine in doses as directed in the pharmacopœia is absolutely dangerous and should not by any means be administered to the sick.

HERCULES ARRESTED.

Franklin Morrison, a coloured man, known as the American Hercules, who has been performing at Southend, was, together with Ethel Gresswell, a married woman, committed for trial in that town on a charge of stealing from William Henry Wiles, manager of St. Paul's Cray, Kent, a gold watch and chain, valued at forty guineas, a pearl and gold scarf pin, valued at thirty guineas, and £10 in gold. Wiles was paying a visit to Westcliff when he met the male prisoner at the Queen's Hotel, and, after some conversation, they drove to another hotel, joined the female prisoner, and called at several public houses. While driving to Rochford at midnight it was alleged that prosecutor was relieved of the property mentioned.

Some day we may have our food served to us economically, in proper proportion and in dainty form, by scientific corporations, but until that time the housekeeper must wrestle with the problem in her own home. To solve this problem successfully she must know what the body needs for its best growth, what foods supply these needs, and approximately in what proportion these foods must be eaten; and throughout all she must understand that foods to be digestible and nourishing must be properly and palatably cooked. It is a rather staggering summary of requisites, but when a few of the first principles of nutrition are mastered the rest of the lesson will be easily learned, and the daily food supply will almost unconsciously be regulated with regard to the special needs of the family.—*Good Housekeeping.*

——CHARACTER BUILDING THROUGH THOUGHT.——

How Negative Creeds Paralyse.

NEGATIVES do not accomplish anything. There is no life in them—nothing but deterioration, destruction, and death. They are great enemies of the success candidate. He who is always talking down everything, and is continually complaining of hard times, bad business, poor health, and poverty, attracts to himself all the destructive and negative influences about him, and neutralises all of his endeavour.

Constructive thought abandons one who is always thinking destructively, and using destructive language, for he has nothing kindred with the positive—nothing to attract it. Creative principles cannot live in a negative, destructive atmosphere, and no signal achievement can take place there. So negative people are always on the down grade and become failures. They lose the power of affirmation, and drift, unable to get ahead.

F. W. ALLEN.

The well known Vegetarian and Pedestrian.

Negatives will paralyse your ambitions, my young friend, if you indulge in them. They will poison your life. They will rob you of power. They will reduce your self-confidence until you will be a victim of your situation instead of a master of it. Power to do is largely a result of self-faith, or self-confidence. No matter what you undertake, you will not do it until you think you can. You will not master it until you first feel the mastery and do the deed in your mind. It must first be thought out or it can never be wrought out. It must be a mind accomplishment before it can be a material one.

There is no science in the world which will bring a thing to you while your thought repels it, and while doubt and suspicion linger in your mind. No one can pass his self-imposed bounds or limitations. He who would get up in the world must learn to deny his belief in limitation. He must throw all negative suggestions to the wind. He must think success before he can achieve it. He must affirm continually with decision and vigour that which he wishes to accomplish or be.

Supposing that a boy, some morning, should say, "I can't get up; I can't get up; what's the use of trying?" It is perfectly sure that he could not get out of bed until he thought he could, and had confidence in his ability to leave his bed.

DON'T BECOME A HELPLESS VICTIM OF "CAN'T."

No boy can expect to rise in the world when he is all the time saying to himself:

"I can't do this thing; it is useless to try, for I know I can't do it. Other boys may do it, but I know I can't." The boy who thinks he can't master his lessons, who decides that he can't solve his problems, and who is sure that he can't go through college, can not do any of these things. Very soon, he will become the victim of chronic can't. Negation will have mastered him. "I can't" will have become the habit of his life. All self-respect and self-confidence, and all consciousness of ability will have been undermined and destroyed. His achievement can not rise higher than his thoughts.

Contrast this with the boy who always says, "I will." No matter what obstacles confront him, he says, "I will do the thing I have undertaken." It is the constant affirmation of his determination to do the thing which increases his confidence in himself and his power to do the thing until he actually will do it.

It would be impossible for a lawyer to make a reputation in his profession while continually thinking about medicine or engineering. He must think about law, and must study and become thoroughly imbued with its principles. It is unscientific to expect to attain excellence or ability enough to gain distinction in any particular line while holding the mind upon and continually contemplating something radically different.

Is it not, therefore, more than foolish, even ridiculous, to expect to develop a strong, vigorous mentality while acknowledging or contemplating weakness or deficiency?

So long as you contemplate any personal defect—mental, moral, or physical—you will fall below your possible attainment, and can not approach your ideal or standard.

So long as you allow negative, destructive, tearing down processes to exist in your mind, you can not create anything, and will be a weakling.

Many are Handicapped by Failure Thoughts.

Most people go through life crippled and handicapped by thinking weak thoughts, diseased thoughts, or failure thoughts. It would be just as sensible for a girl to try to develop the highest type of beauty of physique and character by holding in her mind the ugliest ideals and thinking of herself as hideous. If she wishes to be beautiful, she must hold steadily the beauty ideal in her mind and try to measure up to it; then not only the physical but also the moral nature will respond to this effort to attain the æsthetic ideal; but, if she goes through life thinking she is hideous, and deformed, and lamenting the fact, beauty will never respond.

What a misfortune to see bright young men or young women hampered and restrained in their careers because of holding sickly ideals and confessing weaknesses and defects! Banish these ghosts, these unrealities, these enemies of your success and happiness for ever from your mind. Rise up out of the valley of despair and despondency, out of the miasma which has poisoned the air around you, and out of the foulness which has suffocated you all these years, into the atmosphere of excellence, of power, and of beauty: then you will begin to accomplish something in life, and to be somebody.

If people could only realise the demoralising influence of holding sickly ideals or failure ideals in the mind until the standards of excellence are all dragged down to the level of mediocrity or commonness, they would never again be content to dwell in the valley of failure, or live in the basements of their lives.

Applying for a post in the police of the Central Provinces of India, a native wrote: "I have a good long equiline nose, piercing eyelashes on a semiglobular face and a good physic. My family has a history that takes my imagination back to three pedigrees, when my father was a Millioner. When the vicissitude and times matter change and my father was driven to the necessity to accept a schoolmastership. Ultimately he enjoyed his well earned pension by the time he gave up his ghost. In case my aspirations turn out a reality I shall as a matter of course be bound to prey God for your long life and prosperity."

EXERCISE WITH DISCRETION.

By "GERALDUS."

THE physiological effects of exercise have, particularly within the last decade, been carefully studied by the authorities, in the provision of gymnasia, additional parks and open spaces, and every facility calculated to meet the requirements of the community in that direction.

Such acts of public spirit have been responded to with avidity by would-be athletes, and it is beyond doubt that the outcome has been largely beneficial, a fact which is rendered distinctly visible by the well set up appearance of units of humanity who have hitherto favoured a careless, shambling form of ambulation, ungainly in its appearance, and deteriorative in its effect.

On every side we come across the paraphernalia prescribed for muscular exercise, and in many a sleeping chamber one may come across evidences of the enthusiasm of the occupant by the presence of strange devices holding a place of honour on the hooks of the apartment which were formerly appropriated to less serviceable purposes.

Exercise that is not violent is an essential to the well being of the complex machinery of the human body. The greatest stress of a severe character falls on the lungs, the heart, and great vessels. The respirations are greatly increased, more carbonic acid is expired than at rest, and the blood circulates rapidly through the lungs. If exercise is too severe, congestion of the lungs may come. This is generally the cause of death of horses in the hunting field, which have been taxed beyond their powers. In running and great exertions, the heart's work is enormous, being estimated, on an average, as from 122 to 277 tons lifted a foot. The pulse on any great and unwonted exertion frequently becomes intermittent; but it appears that disease of the heart and vessels is more common among men who occasionally make great efforts than in the case of those who work regularly and continuously.

The effects of excessive exercise not alone affect the heart and lungs, but also the whole nervous system and digestive organs. A notable illustration of this theory is given in the case of an American pedestrian, who had attempted to walk 400 miles in five consecutive days, and who actually did walk 317½ miles during four days. There was progressive decrease in the weight of the body; the temperature was lowered as well as the pulse; there was loss of appetite, and but little sleep. On the third day great drowsiness was noticed, and the pedestrian became dizzy; he staggered, and fell on the track. The fourth night sleep was obtained, and there was a slight gain in weight. The physiological result was very carefully examined by a staff of medical experts, especially with regard to the amount of nitrogen eliminated in the course of the abnormal strain. The result proved that excessive and prolonged muscular exertion increases enormously the excretion of nitrogen, and that the excess of nitrogen discharged is due to an increased dissimilation of the muscular substances.

It is, however, a question of degree (1) excessive exercise; (2) unnecessary exercise; (3) stimulating exercise. Space forbids further remarks respecting the first of these propositions. With regard to the second, it may be affirmed that the ordinary daily work of many trades, as well as the routine followed by soldiers and sailors, must be taken into consideration when exercises are prescribed. The-

following tabulation, by Letheby, demonstrates the

ACTUAL DAILY WORK IN PERMOS RAISED ONE FOOT HIGH.

Kind of Work.	Amount of Work in foot pounds.
Bricklayer's labourer carrying bricks	1,627,200
Coal Whipping	1,774,221
Ascending Activity	1,074,313
Treadmill	1,000,000
Turning a Winch	837,766
Pedestrians (20 miles a day) ..	792,000
Paving and Pile Driving	788,480
Porters Carrying Loads	732,480
Shot Drill Punishment	694,000
External Work or Actual Labour	1,611,604
Work of Circulation (seventy-five beats a minute)	500,549
Work of Respiration (fifteen beats a minute)	98,496

It may be pointed out with regard to the third section of the argument, that this applies to those engaged in sedentary pursuits. To such the exercises which have now become so popular, and which are undoubtedly doing much practical good, are absolutely essential for good health. Eminent scientists have testified to the alarming physical deterioration which has been going on for generations past, and the absence of facilities in crowded areas, and the equally detrimental absence of guidance and training, have been potentially responsible for the impoverishment and attenuation of our species. History has shown how much latent power of astonishing compass, lies hidden within the human frame; now, at the present time, Mr. Sandow is giving a splendid demonstration of the value of this evidence by his accomplished work. Exercise, exercise, exercise, is the principle which will bring certain groups of muscles into play, that will lend all but supernatural powers where they may be least expected, even to the extent of the powers of the hero of Chaucer's song:

"The miller was a stout carl for the nones,
Ful bigge he was of braun, and eke of bones,
That prov'd wel, for over all they came
At wrastling he would bere away the ram."

Nothing can conduce more to the upbuilding of the system than that form of exercise which an expert can prescribe for the necessity of every human. And the best doctor of the present day is not to be found in surgery or consulting-room, but in the gymnasium, which has every antidote fit to eradicate any evils that play pranks with the constitution. The people would be energised and rejuvenated by popular appreciation of the new methods adopted in physical culture, and it behoves all those who have personally profited under the treatment to render every publicity to their testimony of the good which they have realised, and every recommendation is the due of the pioneers of this great innovation for both the physical and moral good of the community.

LITTLE James had been imparting to the minister the important and cheerful information that his father had got a new set of false teeth.

"Indeed, James!" replied the minister indulgently. "And what will he do with the old set?"

"Oh, I suppose," replied little James, with a look of resignation on his face, "they'll cut 'em down and make me wear 'em."

SHE: "You are very depressed. I didn't know you cared so much for your uncle."

HE: "I didn't; but I was the means of keeping him in the insane asylum the last year of his life, and now that he has left me all his money I've got to prove that he was of sound mind."

"Hello, got a new set of teeth, eh? How long have you had 'em?"

"Oh, quite a while. Ever since the last decade."

First Pedestrian—"Out walking for your health?"

Second Pedestrian—"Yes. I'm going for the doctor."

TOMMY ATKINS, Junr.

The New Duke of York's School.

IN a little while Londoners will miss those small soldier boys, each of whom, to the extent of four feet odd without his boots, gallantly upholds the noble traditions of the British Army. The Duke of York's School, or, as it is entitled over the Corinthian portico of the present building, "The Royal Military School for the Children of Soldiers of the Regular Army," will soon be transferred to Dover, where new school buildings are being constructed.

We shall be sorry for them to go—those small sons of the Army, who add a touch of colour to the streets of Chelsea, and who have long been the pride of many generations of nurserymaids and children. We shall miss them from the Lord Mayor's Show, and from the Agricultural Hall, where it was pleasant to see them marching with quick step and squared shoulders to the music of their band, a music as loud and triumphant as though the Grenadiers were coming down the street. Their little drum-major, with his flying baton, has been the hero of many a pageant, and to see these young red coats unlimber a gun or give a display of musical drill was a sight to stir the blood of old fogeys.

Still it is for their good, no doubt, that they should go. As Colonel Fayrer, the Acting-Commandant, explained to *The Tribune*, the playground of the old school is hardly adequate to the physical needs of the boys. The grass on the parade cannot very well become their playing field, as it would soon be kicked into mud, and so they are restricted mainly to the asphalt yards and gravel walks. There will be more space at Dover, and the physique of the boys will benefit by the salt air.

"Still," said Colonel Fayrer, "it is a pity they have to leave London with which their traditions are so bound up. They are adored in Chelsea, and their good behaviour and general smartness have won the admiration of the public. They are living witnesses to the effect of military training and discipline."

The school was founded under the patronage of the Duke of York in 1803 out of funds provided from unclaimed money belonging to officers and men killed in the Peninsular war, and the institution is now maintained by the State. The school, it should be remembered, is primarily a memorial to men who died for their country, and the soldiers' sons who are now trained there are receiving, not the charity of the public, but the recognition of the Government for the services of soldiers killed in battle.

The full strength of the boys is 550, and this number is always maintained. They are selected from children of all the regiments of the Regular Army, and the preference is given to the orphan sons of soldiers killed in active service, and then to children whose father or mother is dead. This, however, is not an absolute rule, and sometimes a boy is selected from the children of a soldier who has served well and has, perhaps, a large family.

The boys enter as "recruits" at about nine years of age, and three months later they become ordinary privates of the school. Strict military discipline is maintained, and the organisation of the school is exactly similar to a battalion of any regiment of the line. Boys who show special diligence, smartness, and good behaviour are promoted to be corporals, lance-corporals, and colour-corporals. Above them are three quartermaster-sergeants, the adjutant, and the commandant. On the educational side there are ten Army schoolmasters, some fifteen

pupil teachers selected generally from the boys who have finished their training and wish to become Army teachers, and monitors with the rank of sergeant.

"You would be surprised," said Colonel Fayrer, "how quickly this military discipline shapes the boys into smart, serious little soldiers. The corporals have a full sense of their responsibility and the honour of the school at heart, and they learn very rapidly how to sustain their authority and exercise their command as 'non-commissioned officers.' Any misdemeanour is reported at once from the corporal to the lance-corporal, to the colour corporal, to the adjutant, and to the commandant. The first thing in the morning the culprit is solemnly marched up—quick step—halt—salute—between a quartermaster-sergeant and a lance-corporal, and I, as acting commandant, consider the gravity of the situation and order the necessary punishment, of extra drill, or what not. They take their punishment like men, but I am bound to say they are good little fellows, and extraordinarily well behaved. There is nothing like discipline!"

Tommy Atkins, junior, is as happy as a king, or a field marshal, at the Duke of York's School. At nine years of age he realises the most glorious dream of childhood, and becomes "a real soldier." He is proud of his uniform, he is the heir to great traditions, he is a son of the Army. He has the best of toys, a gun which will shoot, a real drum to rattle with the merry sticks, a bugle to blow with soul-stirring music that summons his comrades to dinner, to school, or to bed. He is one of five hundred and fifty boys in red among whom there is a real esprit-de-corps. He lives in a romance which is none the worse for being real. In the school hall there are the uniforms and accoutrements of soldiers—the fathers and forefathers of his own comrades who laid down their lives in the service of their country, and on the school walls, in letters of gold, there are the names of the Duke of York boys who did honour to the school, receiving the greatest prize of which any one there could dream—the King's commission.

And it is not a rare thing for such promotion to be given to old boys of the school. Since the year 1900 there have been twenty-one commissioned officers who once belonged to the Duke of York's—who still belong, indeed, for one of the pleasantest things about the school is the way in which the old boys still keep up their relations with it. At Christmas and other holidays they come back—heroes every one of them, to the small round faced lads in the smart little uniform.

It is a great day when some bronzed young officer steps into the yard with the commandant and adjutant, to take a look at the old place and to shake hands with the hero worshippers who gather round to gaze in awe at one of themselves grown in glory!

At fourteen years of age the boys leave the school to make way for fresh recruits, and 80 per cent. of them go into the Army as drummer boys, buglers, or boy clerks in the Service corps. They are eagerly welcomed, for it is generally acknowledged that a Duke of York boy is already a soldier man, and need be taught nothing in discipline and drill, and the whole duty of Tommy Atkins, senior.

And now, in a few months, the fine old building which has been the home of the school for more than a century will be abandoned, and after a ceremony on the parade ground, a little bugler will step into the square to play the mournful notes of the "Last Post," which will tell to those who hear them that the Duke of York boys have said good-bye to London.

NOT TOO RESTFUL.

"The 'rest cure,'" said the pale faced man, wearily, as he stopped to reply to the question of an inquisite friend, is not all my fancy painted it. Here is how it worked out in my case.

"At 7.30 a.m. the nurse came to take my temperature, at eight I had to take a bath and breathing exercise, then came medicine, after which followed breakfast, a visit from the resident physician, massage, a visit from my own doctor, a slight operation to test the purity or otherwise of my blood, more medicine, dinner, a visit from another patient, letters and tradesmen's bills, electrical treatment, beef-tea, more medicine, another visit from the physician, a cold pack and a glass of milk.

"That's how the day passed. At eight I was thoroughly exhausted and went to sleep, the first real application of the 'rest cure' I had known since the morning.

"'Rest cure,' indeed!" And he passed on with a growl.

HOW DO YOU USE YOUR ENERGY?

A Talk about the Life Force of the Body; Its Application and Misuse.

EVERY person has a limited amount of energy to use. Some people have more, some less. Much depends upon inherited constitution and acquired powers. The amount of energy at the command of each person varies greatly, but the amount of energy that each man or woman possesses becomes practically a fixed quantity, barring, of course, times of sickness.

Everyone is familiar with the term "horse power." We say this engine is one-horse power, that engine ten-horse power, another fifty-horse power, and so on. Horse power is a fixed quantity agreed upon by machinists. Some day there will be a similar term as applied to man—"man power." One-man power, two-man power, five-man power. No doubt there will be some way to fix upon the amount of power which each person possesses normally. One person will be found to possess one-man power; another two-man power, and so on.

Nature has endowed each person with a certain amount of energy, or power.

Crossing the Equator—"Father Neptune comes on Board."

A living organism cannot, to be sure, maintain an exact degree of power from day to day like an engine. One day a man will have more energy; another day less. But it remains true that it will average up year after year to a tolerably definite amount.

The amount of energy you had at your disposal last year will be about the amount of energy, other things being equal, that you will have at your disposal next year. What are you doing with this energy?

That is the question we would like to raise.

Some people use nearly all the energy in their possession to digest food. They eat too much. They eat badly cooked food. They eat kinds of food unfit for human consumption. They manage to survive, of course. The digestive organs succeed in performing their task every day, but they succeed in doing it only by using up energy that should be devoted to higher purposes. How many people there are in this world that are nothing but digesting machines. They carry around with them a great digesting apparatus, large enough for four men. These people are in the habit of saying: "Oh, I can eat anything! I eat whatever I please. Nothing hurts me. I can digest horseshoe nails." So they can, but the trouble of the matter is they can do nothing else. Their bodies are ponderous and practically useless. Their minds sluggish and utterly devoid of mental activity, so that they encumber the earth with an unprofitable existence, doing nothing but consuming food. They live to eat, and have really no other purpose in life.

Other people spend all their energy in excesses of some sort—late hours, alcoholic beverages, and other excesses, which drain away their vitality as fast as they can accumulate it.

Others spend their vitality in fretting and fuming. They accomplish very little work. They turn round and round in a circle, hurling invectives to the right and to the left, scolding and berating, shouting and gesticulating. Like an engine that has lost its governor, they whirl around with fury and damaging velocity, but all to no purpose.

Other people spend their energy in trying to look pretty. All day long they fix and powder and pose. To keeping the skin white, the body erect, preventing wrinkles from appearing, and the hair from turning gray, their energies are mainly devoted. They take exercise only to keep themselves looking nice. All the energy with which Nature has endowed them is used to adorn and to perfect the exterior man, leaving the inner man untouched.

Others spend their energies in some ill-conceived, impracticable, ambition. They are trying to accomplish some impossibility. They fail and fail and fail, but still they keep at it. A little reflection would show them the folly of their lives, but the reflection never comes. On they go, misguided, undirected, scattering their energies by the wayside, gaining nothing for their efforts; making themselves ridiculous or mischievous.

Others spend their energies solely through mental activities. They use the brain only. The muscles shrivel up and become useless. The digestion is weakened and disturbed; circulation feeble and fitful. The brain bulges with its excess of blood and throbs under the stimulus of undue activity. Life becomes of uncertain value. Nervous headaches alternate with chronic dyspepsia. The feet are cold, the head hot, the heart flutters. Still they plod on in their weary routine, seeing no way to change; the energy of the whole body concentrated upon the brain.

Others are muscular machines. All day they lift and lug, pull and push, confining the energy and nutrition of the body to the few groups of muscles to which their work gives immediate use. The body becomes mis-shapen, the shoulders are bent, or the legs crooked. There is no symmetrical development of the body. Perhaps one-third of the muscles are neglected and the others overworked.

Others expend all their energy in groundless fear and needless apprehension, Afraid of catching cold, catching some disease. They feel sure that smallpox or appendicitis, or some hidden disease, waits around the corner ready to spring out at them. Very few of their waking hours are spent in free, undaunted, spontaneous activity. The burden of fear hedges them around, continually weighing them down and making their lives miserable.

Thus we might go on and enumerate many other ways in which people are wasting their energies, squandering their vitality.

The cure for all this is something to do. A vocation that commands the energies of the whole body. Not too many hours in the day. Not confined to brain or muscle alone, but a vocation that gives free, untrammelled activity to every power

of the body. Such a vocation is the only cure.

The trouble in this matter is that most of the vocations in the modern commercial world are one-sided in their development of body and brain. Either too much brain work and too little required of the muscles, or else too much is required of one set of muscles, while other muscles are unused. This one-sided vocation is the curse of the world. Medicine cannot cure it either. Surgery would do very little toward mitigating the consequences.

Very few vocations besides agriculture stimulate and invite the symmetrical development of the body and brain, of muscle and nerve. Yet the world is advancing along these lines. Physical culture has made millions of people self-conscious regarding the development of the body, and honest efforts are being made to make up in physical exercise the development which is lost in the daily grind of hard work.

It was a sorry day for the development of the human body when the machine came in to supplant hand work. In those countries where most of the work is done by human hands the people are healthier and happier for it. But the machine has come to stay. All there is to do is to make the best of it. After a while even machine work will be adjusted to the physical necessities of the people, so that each man and each woman can be supplied with a vocation that will help rather than hinder development of the body. In the meantime everyone should do the best he can to give all the parts and powers of the body a chance to develop. Use is the only developer. Such a vocation as confines and dwarfs the body or brain must be supplemented by such exercise as furnishes the needed development. Then there would be very little for doctors to do.

Everyone should have a healthful vocation. A vocation that makes an equal draft upon the powers of the body. There would be very few criminals, very few hospitals, very few insane. The hospitals, insane asylums, and prisons are filled to-day with the unhappy victims of one-sided, unwholesome, brain-weakening, body-warping vocations.

Weed out the Unfit.

THE STATESMAN'S REAL TASK.

By Prof. Flinders Petrie, F.R.S.

MUCH discussion has been aroused by Professor Flinders Petrie's bold attack on present ideals, and especially on Socialism, in his Huxley Memorial Lecture a short time ago. As the text of the lecture will not come into the hands of many who will be interested in these remarkable views of the greatest living Egyptologist, Professor Petrie has developed them for the benefit of *Evening News* readers in the following paper:—

That "like breeds like" is a saying of which the truth is better than the grammar; but it is one that has been acted on ever since the days when, as ancient writers tell us, savages sorted out their children by parental resemblance. To the most casual view we know how one family will be much alike in carefulness, in saving, in getting on well; while another family will have a fatal habit of getting into difficulties, squandering, and general decay. Nature has provided the great corrective by the inferior families tending to die out, and the better types succeeding and prospering. Were it not for this we might all be blobs of jelly in the mud to-day.

The whole advance of organic life from its beginnings is because "nothing succeeds like success"; and whatever gain of structure or character was once acquired has resulted in making its owner better fit for the battle of life, and so gaining an advantage over the inferior examples. All this is so well known now, so generally accepted as being true, that it may seem needless to state it over again.

EVILS OF SOCIALISM.

The whole purpose of the Socialist cries to-day is to remove the great weeding power of Nature, and to destroy the only system which has raised man and may yet raise him higher.

Equality of wages is the pivot of trades unionism, that no man shall earn more than the weakest who can work. This is as if a fleet of swift ships were all to be kept back to the pace of the lame duck who cannot make way. All natural advantages are to be thrown aside, and the

result is fixed by the weakest. As surely as bad money will drive out good, if the purchasing power is the same, so surely will bad work drive out good if the wages are the same.

The right to maintenance is another cry of the weary Willies, and tired Tims, and slow Joes, who are unfit or too lazy to keep themselves. But is there any such thing in Nature? Certainly not; and the easier the maintenance the more brutal and worthless is the animal. Compare the swallow, which must fly its hardest to pick up its gnats, and the sloth, which when it has stripped one tree of leaves drops to the ground to crawl along and sling itself on to a fresh tree to be stripped.

Compare the easy maintenance of the aphis, which sucks its leaf until it dies, and the activity of the ant, which runs round and gleans from everything. Easy maintenance means deterioration in a few generations, if not sooner, and the right to maintenance is the right to deteriorate. Many people unhappily think that the sayings of Christ have nothing to do with everyday life; the plain meaning is too often evaporated into something that does not touch our actions. But the plainest statement in every Gospel, over and over again, is that the Kingdom of Heaven is ruled by the principle of "Whosoever hath to him shall be given, and whosoever hath not from him shall be taken, even that which he seemeth to have"

The Kingdom of Nature and the Kingdom of Heaven are at one in this, that the only road to any advance or improvement is by using to the full every ability and every opportunity, and not by falling back on any fictitious rights that never exist except in the dull brains of the incapable.

EQUAL OPPORTUNITY.

The equality of opportunity is another favourite principle. That all men are born free and equal may be repeated by man as often as he likes, but he can never make it true. All men are born in bondage to their fathers' sins and faults, and no two men are ever alike or equal.

If we were all rigidly equal, progress would be impossible, as there would be no stimulus to improvement, since no man could gain by it. Now the deadly influence of this fallacy of equality is in depriving those who can most profit by advantages of ability, in order to give to those who are incapable of benefiting as much by the advantage. There is not enough first class education to go round—it is too expensive to supply it to every body. But if it is to be insisted that the children of incapable parents are to have as much or more lavished on them as the children of the capable, it is depriving the more able of that benefit which they could best use. To tax the capable man in order to pamper an asylum of lunatics is a crime against Nature and society.

The whole history of man shows a ceaseless pressure of race upon race; it may come in quiet competition at home or abroad; it may come with fire and sword. But come it always will; and the race like ourselves now, whose motives and ideals check its internal advance by diminishing the chances of the capable, will most certainly have to make way for some other race which has used its natural machinery for improvement.

The only means by which all natural progress has been gained is by weeding out the unfit; and the hardest weeded race which has endured most has always come to the top. To check the weeding of Nature is the surest road to national extinction.

IT is not business that kills, but intemperate living of every kind. It is the excessive play of the emotions and the unrestrained gratification of the appetites, not the hard work and the rush, that chiefly contribute to the premature fatalities. The true answer, then, is but a modernised variant of the ancient "wine, women and song." The times have changed, the ways of life are different; but now, as heretofore, hard work is beneficial to health, and, as always, there is the penalty for excess in the pleasures of life.—*Journal of the American Medical Association.*

A PHILADELPHIA baker is the authority for the assertion that the latest fad of dyspeptics is bread made with sea water instead of fresh water. "It has a saltier taste," he says, "than we are accustomed to, but it is very palatable. In fact, he who likes salty things is apt to like it better than the other kind of bread." A physician, he says, "asked me about three months ago to make some of this bread for his patients. At first I made six loaves a day, but now I make thirty. My sea water comes up to me from Atlantic City three times a week. The dyspeptics who buy the bread say it is the only kind they can eat fresh without discomfort."

CATARRH: ITS CAUSES AND TREATMENT.

Nearly every person has catarrh in some part of the body, and yet they do not know why they have it. Men are made miserable by large quantities of catarrhal matter in the stomach, or by passing great quantities of catarrhal matter from the interior lining of the bowels. Some annoy their friends by odours from the nose. Others become a nest of contagion and wind up in death by consumption, never suspecting that the real cause of their condition is the fact that they are eating enormous quantities of starchy foods, made over-soluble by cooking.

TEA DRINKING A CAUSE OF COLD FEET.

Prof. Hutchinson, F.R.S., reports the case of a lady who could not take tea because it made her feet icy cold and wet with perspiration. She thought that the soles were chiefly affected, and that the hands were also made cold, but not so markedly as the feet. Mr. Hutchinson had long been familiar with the fact that tea made the feet of some persons cold, but did not know that cold perspiration attended it. He believed the coldness to be caused by contraction of the arteries, inasmuch as the feet shrank. Alcohol had usually an opposite effect.—*Popular Science.*

A famous Skater, who is also an Enthusiastic Sandowite.

ETHER DRINKING.

To the evil of alcohol are now added the evils of ether drinking, which has spread alarmingly in Eastern Prussia, where ether is sold in the saloons, like any liquor, four or five grams to the glass. In the town of Memel alone, it is stated, the amount thus sold last year was 8580 litres, and in reality twice this amount was consumed, the rest brought in by smugglers. The effect is said to be four times more powerful than any equal amount of alcohol, but its continued use produces intolerable suffering and incurable lesions of liver, kidneys and heart.—*Jour. de Med. de Paris*, September 3rd.

£40 A YEAR ON PILLS.

New Zealand has awakened to the dangers of what may be called "The quack drug habit." It is proposed that the Health Officer shall give a certificate concerning those whose medicines he has discovered to contain no dangerous ingredients, and that newspapers shall be forbidden to insert advertisements of a harmful nature.

As is pointed out, however, there is a danger of this certificate appearing to mean more than it does, as it could not be refused to medicines which are not beneficial, if they contained nothing positively deleterious.

There is in Colonial, as in American life, says *Women and Progress*, a tendency to rush to drug store or chemist and to try the merits of every new nostrum from mere curiosity.

In a magistrate's court in Sydney some time ago a witness confessed to spending forty pounds per annum on pills; he spoke almost as if it were a hobby, affording him definite pleasure.

PHYSICAL TRAINING IN IRELAND.

It is announced in Irish command orders that the responsibility for supervising the physical training of the troops at stations in the Irish command will be divided as follows: Captain A. Bromley, superintendent of gymnasia, Dublin, Curragh Camp, Naas, Newbridge, Kildare, Athlone, Mullingar, Galway, Ballinsaloe, and Birr; Captain E. F. M. Urquhart, Cork; Lieutenant H. A. Kaulbach, Belfast.

A strong man could only carry £50 worth of pennies.

IN THE ARENA OF SPORT.

IN THE FAMILY.

WESTMINSTER School has a most accomplished youngster in W. B. Harris, a brother of S. S. Harris, the famous inside left. He figured in goal against the Old Foresters at Vincent Square, and performed so finely that praise for him was heard on all sides. But, as a matter of fact, his proper place is at outside left, and when he is fit again for forward work he will play inside to Gow. Next season he will be an "Old Boy," and will partner his brother Stanley on the left wing for the old Westminsters. He is going up to Cambridge.

VILLA'S CRIPPLED BACKS.

ASTON Villa, by a curious coincidence, have three right backs incapacitated. No fewer than seven of the players are now in the doctor's hands and of these four are full backs, viz., Spencer, Riley, late of Brentford; Miles and Logan. Pearson will not be available for a month, and Boden and Millington are also unfit for football.

SPYING AT SECRET PRACTICE.

ONE of the great features of American football is the secret practice, where formations are invented to surprise opposing teams. Before the great match between Missouri and Iowa, the Iowa team held a game in the dark. Fearing that Missouri would employ a spy, they had their scouts out, who suddenly spotted their rivals' assistant coach taking notes from a coign of advantage underneath the grand stand. He was promptly dragged out, and only the clemency of Chalmers, the Iowa coach, prevented him being well "loaded" and dropped into the adjoining river.

K. MACLEOD CAN "BOOT."

THE South Africans are great admirers of a fine kicker, especially if the special gift be speedily utilised at the right moment and when the interests of the side are well served. Such splendid men with their feet as Marsburg, Krige, De Villiers, Jackson, Mare, and the younger Morkel could not have wished for anything better than Kenneth Macleod's work for Cambridge. He had to be closely watched whenever the ball went in his direction, as with either foot he found lengthy touch in an instant. In fact, a full-back with plenty of time to spare could not have executed his task in a more certain fashion. Apart from his superlative kicking Macleod was by far the most resourceful of the Varsity "threes."

MARSBURG GREEN WITH ENVY.

AUBURN haired full-backs seem to inspire the African "threes." It is evidently their favourite colour. At Gloucester Wood was kept continually busy, and at Cambridge Scoular could also feel that he was doing a little overtime. Business was heaped on him, and on the whole he did it well. Scoular is far more formidable looking than he was a few years back; he has grown extensively. But, despite his physical strength and his honesty of purpose, Scotland's "full" was completely beaten on several occasions. There was, however, one little incident where he determined not to be worsted. He had been collared in possession over his own line by several of the opposition. Still he clung tenaciously to the ball, and a regular old-fashioned maul in goal ensued, until the referee modernised the game with his shrill whistle. While this was happening, Marsburg, who always longs to share in any little fun—poor chap, he gets but few chances—was working his jaws convulsively with envy. When he did get an opportunity to shine he made the most of it, and neither the spectator nor the aggrieved opponent forgot that they play hard "Rugger" at Kimberley.

FOOTBALLER'S WEDDING GIFTS.

WHEN the admirers of Herbert Smith, Reading's captain and England's international back, became aware that he was about to be married, the Football Association were asked to grant permission for him to receive a wedding gift from the Reading club and their supporters. This was readily granted, and after the Reading-Fulham match, Mr. Barnard Messer, chairman of the Reading directors, publicly presented Reading's popular captain with a handsome silver salver, weighing 132 ozs., an illuminated address, and a cabinet containing silver plate and cutlery. A very fine gold bracelet, too, has been purchased for Mr. Smith's fiancée, while the Reading players presented their skipper with an enlarged framed photograph of himself and an address.

A COMING CRACK.

Cambridge have "in the making" a fine half-back in the young Loretto freshman Godby. Much of his good work against the South Africans consisted of spoiling, and Godby evidently laid himself out to upset the machinations of Dobbin and Jackson. He did not always succeed, but his best endeavours were

quite good, and will probably upset many less clever pairs than Africa's. Godby can also pass out well, but his instigation of attack was a little too obvious to catch the African spoilers napping. But Godby has not to outwit "Bokkan," every day.

GWYN NICHOLLS' ULTIMATUM.

GWYN NICHOLLS, the brilliant Welsh three-quarter, has assured an *Express* correspondent that he will positively decline all invitations to turn out against the South Africans on December 1st. The belief is growing in the Principality that Wales will not succeed in beating the "Bokken," for with Nicholls' generalship absent, and no really clever outside half available, the Welsh attack is rendered so much weaker than it was against the New Zealanders last season. And with the Welsh defence always uncertain the speedy Stegmann and Loubser are likely to cause serious trouble at Swansea.

A CLOSE EMBRACE.

INTERESTING MATCH.

OVER the South London Harriers, five miles steeplechase course at South Croydon on December 15th a running match will be decided between the ex-champion walker J. Butler, and T. E. Hammond (whose record of 8 hours 26 minutes 57 seconds was the best for the London Brighton journey of 52¼ miles until Butler beat it). The prize is being presented by Mr. J. E. Brown, a vice-president of the Surrey Walking Club.

SIX-DAY CYCLISTS.

THE famous annual six-days' bicycle race at Madison Square, New York, will begin on December 9th. It will probably attract fourteen pairs of well known cyclists. They are Rutt-MacFarland, Petit Breton-Vanoni, the Georget Brothers, Vanderstuyft-Stoll, Root-Fogler, Pye-Clarke, Hooper-Hollester, Krebs-Rupprecht, the Bedell Brothers, Walthour-Matt Downey, Mac-Lean Moran, the Brothers Macdonald, Jacobs-Ashurst, and Coffey Collins. This event is recognised as the biggest test of endurance at any sport now held.

PHYSICAL CULTURE IN AMERICA.

THE Board of Education of Philadelphia has authorised the establishment of a department of physical training in the elementary schools of that city. A director is to be employed at a salary of £500 and ten assistants at £100 each. The new movement is to take effect at once, or as soon as plans can be perfected.

GYMNASTICS SAVE 60 LIVES.

BY means of a gymnastic pyramid made by firemen, policemen and citizen volunteers, at a New York city fire, sixty young women were rescued from a fire escape on the second floor, the fire ladders having been delayed. Within a few minutes afterwards the building collapsed.

CLUB SWINGING.—THE WORLD'S CHAMPIONSHIP.

We have received the following letter from Mr. H. Moss, of Empire fame

Middleton Hall,
Gorebridge,
N.B.

SIR,—I note with extreme pleasure that Tom Burrows, the world's champion club swinger, and Henry Burton have decided to accept my suggestion to contest their match for the championship at Waverley Market during the week commencing January 7th next, and in accordance with my offer, I am prepared to put forward a purse of £100 for the contest. I shall be glad to hear that this will prove acceptable to Burrows and Burton.

MICROBE MANIA.

The Fallacy of the Germ Theory of Disease.

Dr. GEORGE W. CAREY.

OF all the negative conditions the race is subject to, fear is the greatest. We are born cowards. Our mothers feared for us before we were born. We come into the world with a wail of fear. All who had anything to do with us feared something evil would happen to us. They were afraid we would catch "cold," or the measles, or whooping cough, or diphtheria, or die from "summer complaint."

Somebody feared all the time that we would get burned, or scalded, or fall out of bed or cradle, or into the well. We were afraid of our parents and teachers; afraid that our lovers would forsake us or we would not have our lessons learned, or that it would rain and break up the picnic.

Later we were afraid of failure in business or that our house or store would burn; afraid on sea and land; of fire and water, lightning, hail, wind and all things, visible and invisible, and yet we wonder why we are sick, and why humanity seems like thirty cents.

But men and women are rising out of the clouds and sleep of fear, and will, when fully awakened, create a new earth.

Ignorance and fear are the causes of the spread of so-called contagious diseases and epidemics. Some noted person, say in Russia, goes for a month with the colon clogged with half-digested food from the caecum valve to the sigmoid flexure, is dosed with nine kinds of drugs and mixed drinks galore, and of course dies. The so-called scientist gives the condition a name; newspaper reporters demand a name; the relatives want a name for the trouble, and so the Latin diploma-plastered doctor says, "It is the Russian influenza or *la grippe*" The public don't know that influenza means to flow out, whether it is water flowing out of the nozzle of a hose or albumen flowing out of the nasal passage of a Russian; and that *la grippe* is French for "catch on." And the dear public don't want to know anything about the plain facts of the operation of the chemistry of life that causes certain results.

The constant cry of the humbugged public is "A name! a name! my kingdom for a name!"

The doctors, the people and the Press describe the symptoms minutely and forthwith others "take it" or "catch it," as the case may be, and the good news is telegraphed to London that the genuine Russian influenza (the real thing) is raging in Europe and is quite fatal. The doctors and the bacteriologists polish up their microscopes and try to find some hitherto unidentified microbe.

They search for germs in the sputa of the patient, and, of course, find them. These germs were found in any decaying organic matter a billion years ago and will be found under like conditions a billion also hence. All decaying or disintegrating vegetable or animal substance swarms with infinitesimal forms of life. This process of metamorphoses is necessary to resolve matter back into its original elements, or universal energy from which all forms proceed.

These microbes or germs swarm through all Nature. They are products or effects, not causes.

These germs are found in the exudations from any orifice of the body in health. The microphobist never thinks of looking for his pet devils in the fluids of a common case, but if the patient is "dangerous" the germ at once becomes illustrious and sees its name in the paper.

The funny part of this whole, ridiculous, microbe mess, however, is the fact that the wise ones (?) declare that *la grippe* is catching and then advise you to wrap up in warm clothing so you won't "catch" it. As if a microbe cares a flip how you are dressed!

In Sweden it is proposed that those who weigh more than 125 lb., or about 9 st., should be taxed.

READERS' CLUB.

President - - EUGEN SANDOW.

Motto :—One may help Many.

For the exchange of Ideas, Personal Experiences and Photos for the encouragement of Club Members.

Every Reader of "Sandow's Magazine" is a candidate for Club Membership.

Members are expected to act up to the Club Motto, and the President will award the Club Fellowship Medal to those Readers who qualify for its possession by

(1) Contributing a letter or experience worthy of publication, and by

(2) Introducing this magazine and advocating Physical Culture, to not less than fifty friends and acquaintances. To secure the Medal the qualifying Reader must send in the names and addresses of the fifty to whom the copies have been distributed, together with a "cutting" of the published "Letter," bearing date of issue, as well as stamp for postage of the Medal.

The fifty specimen copies are supplied free and carriage paid to qualifying members. In the case of foreign and colonial Readers, the sending of fifty names and addresses will be considered as entitling to the Medal.

No medals will be sent without application is made.—THE PRESIDENT.

Not Sub-Edited.

Hyderabad, Deccon, India.

SIR,—As a secretary of Deccon S.M.R.C., and a instructor of Deccon Sandow System Class, I take this opportunity of writing about the plan I have hit upon for spreading the cause of physical culture throughout my country, and for collecting the volumes of Sandow's magazine without spending even a pence from my own pocket money; and I think it would be of great interest to those who want to do either of the two. My dear fellow readers, if you desire to spread the cause of physical culture, or to collect the future volumes of Sandow's beautiful magazine without paying anything at all, please do the following, as I have done.

Without any delay, lend 12s. to S.M.R.C. and send at once 10s. 6d. or 5s. 6d. to the dear manager of the magazine, and receiving the paper show it to your friends, and ask them for the membership, informing that any man giving 2d. a month can be a member and can keep the magazine with him for a time of twenty-four hours a week. After this, I am sure, you will find that seeing the magazine in its new and instructive form, and thinking that 2d. a month is not too much, nearly all of your friends are glad to be members. But choose twelve (or more if you like) such fellows who live near your own house, and every week send the paper first to first, and then to second, and third, and lastly to the twelfth (or the to last of all) member after it take the magazine for your own reading. At the beginning you will have to wait for twelve or more days, but afterwards the magazine will come to you on every seventh day. Now read it carefully and always carry it with you, *i.e.*, whenever you are out either in the day or night time. Keep it in your hands, and to those who will snarly ask you, "What's the paper, and why you always carry it with you?" explain all about Sandow system and about the necessity of physical culture; it is a good plan for spreading the cause.

Doing this, which is easy for any man, boy, or girl, at the end of the year you will see that your club's treasury has 24s.—12s. for the future subscription, postage, etc., and 12s. for you which you had given to it a year before, and that you have with you a volume of the magazine for which you have paid nothing at all. Also you will find that many of your friends are exercising daily. Thus you can spread the cause and collect the volumes as many as you like, without paying a single pie.

But remember, and please remember, not to ask any of your friends before sending the money, and receiving the magazine for then they will refuse, and you will give up the good-idia as a friend of mine has done before. I am very glad to say that by above mentioned plan now I have twenty members, whose number is increasing day by day, and I think that from 1907 perhaps I will have to buy two copies of each issue. At the end I hardly need to add that I will be very glad to hear some of my fellows readers making a "Circular Library" as the happy new year is comming, and is near, and it is a good opportunity for beginning the new year with new things. Wishing every success to you and to your magazine, I am, sir (and want to be till the last moments of my life,) your most obedient servant,

NOOR SHAH KHAN,
Secretary to Deccon S.M.R.C.

Made a New Man of Him.

Curragh Camp, co. Kildare.

SIR,—It was about eighteen months ago that I first had the pleasure of seeing you perform with your pupils at the Leicester Palace. I heard you speak about physical degeneration, and I felt a tinge of shame creep over me, for I was one of those physical wrecks you were talking about, and there and then I resolved to alter my ways, so I got a pair of heavy dumb-bells thinking they would do me some good. But no, they did me no good, so I gave up trying to improve my development. It was about ten months ago that my eyes lit upon a book entitled "Body Building." Then the old craving for bettering myself came back to me, and so I bought it, and now I have the pleasure of showing you what your book has done for me, for I must say that your book made a new man of me. I take the SANDOW MAGAZINE every issue that comes out, and will continue to take it, for it is healthier reading than the "penny horribles" I used to read.

PRIVATE B. CLIFFORD.

Weak Chest and Insomnia Cured.

Cardiff.

SIR,—I take the opportunity of letting you know how I have benefited by your system of physical culture. From childhood I have been a constant sufferer from severe colds on the chest, and inability to sleep at night without a deal of pain and discomfort, but since using your developers I have found a great change in my health.

H. RIMER.

Clerk's Daily Programme.

East Finchley.

SIR,—I am very glad to be able to add to the praise of the Sandow system, under which I have been training for the last two or three years. I am a clerk in the city and find the following very good for keeping fit. In the morning, ten minutes' dumb-bell exercise, as set out in "Strength, and How to Obtain It." ten minutes chest expander and developer, followed by cold bath. Evening: ten to twenty minutes' dumb-bell exercise. Windows always open twelve inches in all weathers; four to eight miles brisk walk every day. I am a teetotaler, non-smoker, and I have never had a day's illness for the last six years.

S. J. BRYANT.

Physical Culture by Post.

Liversedge.

SIR,—I am sending my experience on physical culture, which covers a period of twelve years, so I think that I am quite justified in writing. I started my physical culture career when I was twelve years old by buying your book on "Strength and How to Obtain It," also a pair of dumb-bells. After a year or two with the bells, I purchased a developer and a pair of grip dumb-bells, and had a course of your postal instructions, which I can thoroughly recommend. At the age of nineteen I went out to Africa; twelve months after I returned home. I had rheumatism in my shoulder, so I took up a three months' private course of physical culture at St. James's Street School, Piccadilly, under the tuition of Mr. Eggleton. It quite cured me of my complaint.

I also went to the Manchester School under Mr. Greenfield. When I left for home I was many degrees stronger and healthier in every way, and I advise all who are able to attend one of your schools to start at the earliest opportunity.

I instructed a swimming club in this district under your system for four months. At the examination every man passed for the life-saving certificate and medal. I have read your magazine every month from starting physical culture, and have won several medals for wrestling and other athletic sports.

F. W. FIRTH.

Lost Strength Regained.

South Govan.

SIR,—I have been a supporter of your valuable magazine since I knew what physical culture was, being possessed of all Sandow's apparatus. I for one have followed his rules as far as my occupation would allow it. I can say with no fear if anyone desires to be a man or woman, follow his rules, then you will be able to test for yourself. The grip bell idea is one of the finest ever put into force. I must say, after going through a surgical operation, I lost considerable strength. I took up my old friend the grip dumb-bells and regained the loss in three months.

J. HUNTER.

For the Ladies.

Hamilton,
Waikato, N.Z.

SIR,—If I might be allowed to criticise your magazine I should like to say I know that it is a pity that your "Ladies' Chapter" has become absent. I know several who have devoured it and taken much benefit from this part of your publication.

FRED ATKINS.

[I shall endeavour to meet this by the regular publication of articles especially for ladies.—THE PRESIDENT.]

I RECEIVED my Medal quite safe. Thanks very much indeed. It is a beauty and should certainly find a link on all physical culturists' chains, as it certainly does on mine.

Annan, N.B. WILLIAM RODAN.

CLUB CORRESPONDENCE ALSO RECEIVED.
From W. Bull, London, E.C.

CLUBS, CLASSES AND SOCIETIES.

[The Editor of SANDOW'S MAGAZINE *will be pleased to receive early notice of the intentions of physical culture organisations throughout the country. Photos and reports of progress will also be esteemed and published whenever of sufficient general interest to our readers.—*THE EDITOR.]

Advice to Tailors.

Beccles.

SIR,—There is, I believe, amongst tailors generally, a belief that as it requires no effort to lift a needle, there is no need for muscle. This may be true as regards lifting the needle, but I think anyone will admit it is a great strain on the body for it to be kept in a cramped position for nearly half its life. So I think there is a great need for tailors to exercise those muscles especially. I have lately started a physical culture class here. I am teaching dumb-bell and expander exercises, also boxing and wrestling. I can assure you we have some fine evenings. I am also lending the members all the magazines I have, and to anyone who cares to have one. I am a total abstainer and non-smoker. Before starting physical culture I suffered a great deal from biliousness, which is, I believe, a complaint usual with sedentary workers, but I am quite cured now, which is only one of the benefits I have received.

ROBERT J. CRACKNELL.

Sound and Healthy.

Hebburn-on-Tyne.

SIR,—Having been a reader of your splendid magazine for a considerable time past, and deriving much benefit from same, I think it time I should write to thank you, with heartfelt thanks, for what your system and advice together have done for me. I was a tall lad for my age (far too tall, people said, to be strong) and being thin, it seemed quite probable that I was to be a weakling all my lifetime. But I hit upon your magazine, obtained developer and dumb-bells, followed up your system, and to-day, as a result, I am blessed with a sound and healthy body. I have been trying to live up to motto of S.M.R.C., and after reading magazines, leave them in train or car, and sometimes in barber's shop, when they are always picked up by other young chaps. I also take the magazine to our works and pass it on to all who seek advice or help.

R. FEATHERSTONE.

Physical Culture at Jarrow.

WE live in days of strenuous pastimes. We know something of the thousands that go to see football matches every Saturday afternoon, but no one has given us an approximation of the numbers that actually play the game each week. The total would doubtless be surprising. All these players need to keep themselves in good bodily health, and hence we observe in many towns the success of the physical culture movement. At Jarrow it has made wonderful progress. The Physical Culture School in that borough gives a public display in gymnastics annually, and the last gathering under its auspices was the best it has yet promoted. The large hall of the Mechanics' Institute was filled, the greater part of the audience being young men who watched with interest the clever feats in jumping, weight lifting, parallel bar and other exercises. While youths are improving their physique and hardening their muscles they are away from the common temptations of town life, and considered only from this aspect the work is deserving of every encouragement.

Lewisham Doings.

THE official opening of this school took place recently. An address was given by Mr. E. W. Shaiman (assistant secretary) on "The Young Man's Peril," and short but very spirited speeches were made by Mr. C. O. Pickett (trainer) and Mr. W. R. Storch (captain). It was mentioned that the committee felt greatly gratified at the prospects of the undertaking, and with the manner in which the proposition of formulating the school was received. A letter was read from Major E. F. Coates, M.P., D.L., J.P., wishing the venture success. As the membership is strictly limited, intending members are advised to make early application.

Thanks!

I wish to tender my best thanks to the following Club members for their good work in distributing specimen copies of the Magazine:—Geo. H. Ashworth (Bacup); G. W. Battersby (Rushden); A. E. Henderson (Ayr); Fred Halliwell (Hebden Bridge); E. W. Bowers (Selby); W. H. Dickinson (Seedley); D. Johnson (Manchester); W. Hessian (Rugby) R. C. Bilton (York); Chas. Dixon (Liverpool); H. Greenland (Malsteg); E. J. Addison (Thorp Hamlet); W. D. Hemley (Hemel Hampstead); C. Cowling (Lincoln); R. Cottrell (Smethwick); A. E. Hammond (Watford); P. Jenners (Sheffield); A. W. Ford (Wolverhampton); J. Hill (Aston Manor); W. Finney (Prescot); and W. H. Bodle (Eastbourne).

"SANDOWISM."

By P. H. Rouse.

[*The Editor publishes the following effort of a reader's brain and pen with all due modesty, not for its generous eulogism of the Sandow system, but because of the many shrewd observations it contains.*]

I BELIEVE we need a definite name to distinguish the Editor's scientific system of development from the great number of imperfect systems which have sprung up within the last few years. Many of these are propagated by men totally ignorant on the subjects they profess to teach, and who simply desire to make money. Others are run by eccentric individuals who fill the heads of their followers with all sorts of faddism and nonsense.

Towering above them all in its scientific accuracy, in its grand simplicity and in its freedom from fads and fancies, is the system of development which has produced the most perfectly developed men living, and which I should like to hear spoken of by the definite distinguishing title

"SANDOWISM."

We find many "isms" around us to-day, and they often immortalise the name of their founder. For example, Mesmerism from the teaching of Mesmer, Darwinism from the teaching of Darwin, Wesleyanism from the teaching of Wesley, and so on. Why not then "Sandowism?" Do not let the reader mistake my meaning; such a term would not be employed with the object of giving our Editor an advertisement which his world-wide fame renders quite superfluous, neither would the idea be to immortalise a name which has already achieved immortality. No, the object would be to draw a definite line of demarcation between our system and all other systems.

From this point we might advance another step and distinguish those who follow Sandowism by calling them Sandowists.

The novice who awakes to the fact that his physical development is not what it should be and who looks round for instruction, is in danger of thinking that any book he may come across dealing with this subject is a reliable guide. Possibly he thinks all systems are pretty much alike.

Such beginners often become entangled in a system full of extreme notions and fads as to clothing and diet. The frequent result is that they become a misery to themselves, a nuisance to those they live with, and a laughing stock to everybody. After enduring this for a few months and finding no very definite improvement in their bodily condition they throw the whole thing up in disgust, and refuse to give it any further consideration and their last state is worse than their first.

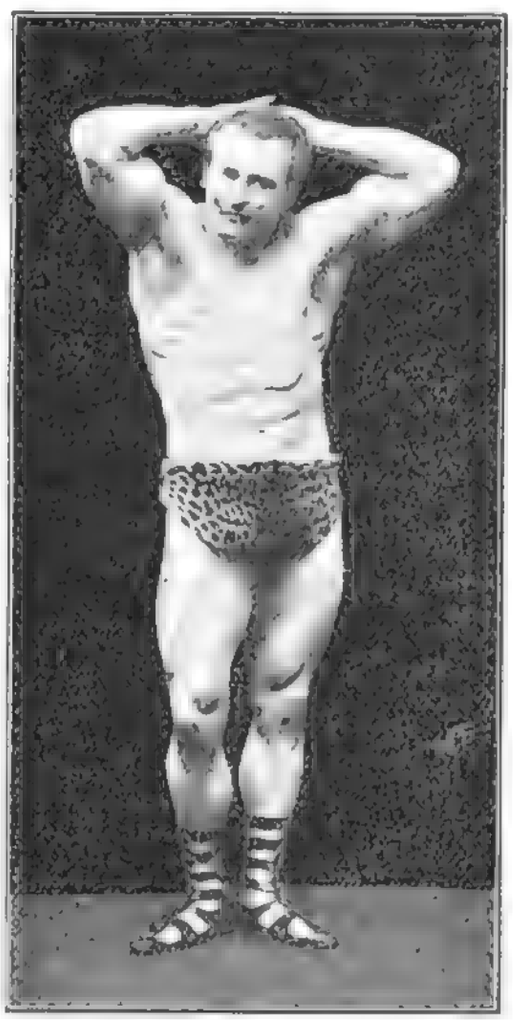
Now I maintain that if the term Sandowism were in constant use a beginner's first inquiry would probably be, as he approached a bookstall, "Have you a book on Sandowism?" with the result that he would secure a volume or magazine which would initiate him into a system which involves no extreme dietetic eccentricities, that does not compel its followers to make themselves conspicuous by all kinds of fads as to their clothing, their food, and their habits, and that is distinguished throughout by its scientific accuracy and its simplicity.

In these days if you speak of yourself as a Physical Culturist you run the risk of being classed with a lot of "cranks" whose peculiarities make them a real nuisance in society, but if you could speak of yourself as a Sandowist how different would be the reception you would meet with.

Sandowism not only shows a man, or woman, or child, the true pathway to perfect health and strength, but it frees them from the shackles of faddists of all kinds. Many individuals have refused to take up physical culture because they feared that it would involve such a

radical change in their diet, and clothing and habits, that they would suffer great loss and inconvenience in their business or social relationships.

Imagine for instance a commercial traveller attempting to make his calls hatless, and wearing sandals, and insisting when dining with a customer on being provided with a plate of nuts and a glass of water. Although these fads doubtless are based on certain great truths, they can seldom be adopted in daily life except by people who possess sufficient money to retire from business competition, and who are indifferent to social pleasures. Here it is that Sandowism scores. It allows its followers to eat, and drink, and clothe themselves pretty much as they please providing that they are temperate and moderate in all things.



THE EDITOR.

The world owes much more to Sandowism than to any other system. Sandowism brought to the front, and has kept to the front, certain great fundamental truths which had never previously been given any particular prominence. Perhaps the greatest of these is that truth concerning the influence the mind has upon the development of the muscles.

Another great truth has already been referred to, namely that moderation in diet is all that is necessary, and extreme notions need not be entertained.

The question may be asked, "How is it possible to bring about the general use of the terms suggested?" I believe that if every Sandowist spoke of himself as a Sandowist, and of his system as Sandowism, the general public would soon appreciate the distinction implied, and would also use these terms to denote this distinction. A so-called physical culturist may in these days be almost anything, and may hold the most insane notions. But a Sandowist would be one who held those great and distinctive truths propogated by Mr. Sandow, and Sandowism would be the system that embraces Mr. Sandow's teaching.

Many people regard Sandowism as simply a muscle making system consisting of a series of monotonous exercises which require infinite patience and perseverance. This, however, is quite a false conception. The Sandowist takes a wholesome interest in all manly, healthy sports and pastimes, especially those that lead him into the fresh air. Another prevalent misconception is that Sandowism, while developing great muscular strength, induces slowness and awkwardness. This is quite a mistaken notion. The stage feats of the founder of Sandowism show not only strength but wonderful agility, and the pupils of this system are encouraged to go in for outdoor sports, and thereby become as supple and agile as needs be. But Sandowism rightly recognises that the artificial life we are compelled to lead does not involve sufficient exercise to keep us in health, or to develop our bodies fully. Even those who earn their living by manual labour will generally be found to exercise only certain sets of muscles, and what development they possess is ill-balanced and inharmonious. It also recognises that no sport, or sports, will produce a

full development of all the muscles, and just as a chain snaps at the weakest point so the man whose development results from manual labour, or from games, is likely to strain or rupture himself at some point where his development is small. Sandowism, therefore, provides a set of exercises which develop every part harmoniously, and which it insists must be practised daily, and with strong mental concentration.

The result of this system of scientific exercises is seen in the ideal development of Mr. Sandow himself.

Other systems admittedly have their strong men but the strong men of Sandowism possess a more beautiful and uniform development than any others.

In conclusion, let me urge every Sandowist to exert himself, or herself, to the utmost to keep our system distinct from the chaos of conflicting systems all around us, and to label it "Sandowism."

The Natural History of the Slum Child.

The following is the first of two articles from "The Scottish Review" dissecting a noble report just issued on the physical condition of the children attending a "slum" school in Edinburgh. It reveals a state of things demanding the earnest attention of all social reformers.

THE highest tribute of praise is due to "the few interested citizens" who have just reported the results of their very complete and revealing investigation into the physical, educational, and domestic condition of the children attending one of the slum schools of the capital. The report makes sad reading, and, as Mr. Arthur Sherwell observes in his forword, its "significance is too plain to be missed, and too serious to need prefatory emphasis." The value of an inquiry based, not on obvious and superficial facts, but on a careful, scientific, well-planned, and co-related system, carried out by competent and trustworthy investigators who are only concerned for the truth, the whole truth, and nothing but the truth, is incalculable. It forms the only possible starting point for those schemes of social improvement which go down to the tap-roots of the evils indicated: it is a mariner's compass to guide philanthropy and ameliorative legislation through the shoals and quicksands which, in the past, have too often wrecked the best meant efforts of reformers. The facts adduced in the report under review cannot be controverted; they are presented in due proportion and in their right relations, and every possible care has been taken to guard against error. The survey is complete over the restricted area explored, and the Edinburgh public can no longer plead ignorance or uncertainty of the social problem crying aloud for solution in its midst. Its eyes are opened, and its duty is clear.

In this and the succeeding article we propose to deal with the physical condition of the children attending the selected school, and the connection established between their bodily health and the character of the houses which they inhabit. We shall also deal with the home life of the children, and the circumstances which account for the degradation of their surroundings. The inquiry under review was the outcome of the report of the Royal Commission (Scotland) on Physical Training, issued in 1903. "The few interested citizens," who were profoundly impressed by that report, determined on an investigation of a somewhat novel kind. They selected a school with a *clientèle* of a widely representative character, comprising not only children from the poorest parts of the city, but the offspring of the substantially comfortable and thoroughly respectable working-class, as well as the scions of many "old families," who continue to reside, for old time's sake, in houses with hereditary associations despite the general degradation of the neighbourhood. With the consent of the School Board every child in the school was

WEIGHED, MEASURED AND THOROUGHLY EXAMINED

by a medical expert, and at the same time an army of carefully selected volunteer visitors was enrolled for the purpose of visiting the home of each individual child, and reporting thereon. An elaborate system of verification was

adopted, and School Board visitors, teachers, employers of labour, charitable, industrial, and provident and ecclesiastical authorities were persuaded to add their quota of information. There were cases in which the police were able to render efficient aid, and their "knowledge was so extensive as to throw a lurid sidelight on the lives some of the children are condemned to lead, owing to the criminal carelessness of their parents."

Some 1390 children in the selected school—which Edinburgh residents will have no difficulty in "placing"—were medically examined by Drs. Edwin Matthew, Mrs. Edith Fowler, A. H. H. Sinclair, E. M. Lithgow, J. M. Farquharson and J. D. Lithgow. The examination was begun in March, 1904, and completed by the end of April, the examiners working, on an average, four hours a day, and completing their examjnation in a month. It is impossible here to present anything more than

The General Conclusions

at which the doctors arrived. The elaborate statistical tables which are appended to the report must be left for the private examination of individuals. The social position of the children is indicated in Table I., which reveals no less than 76·77 *per cent. of the children as living in houses with one or two rooms.* The actual percentages for the various type of houses are as follow:—

Houses of 1 room	..	16·81	per cent.
,, 2 rooms	..	59·96	,, ,,
,, 3 ,,	..	18·69	,, ,,
,, 4 ,,	..	4·11	,, ,,
,, 5 ,, and over		·43	,, ,,

The *mental capacity* of the children was gauged according to the teachers' estimate of the position in class, and is therefore only comparative among the children of the particular school. The number of "goods" and "excellents" awarded by the teachers was fairly high, 45·1 per cent. of the boys being so classed, and 42·2 per cent. of the girls. From this it will be seen that the girls beat the boys up to the age of eight years, but above that age the converse is the case. Referring to this point, the examiners ask, Are the boys and girls up to eight years of age working under equal conditions, and are the girls of better mental capacity than the boys? And are the girls over eight years, owing to their usefulness at home and employment in domestic work, handicapped in school, and thus behind the boys in their teachers' estimate? Out of 735 boys, 136 were reported dull by their teachers, and 121 out of 635 girls.

As to "*health appearance*," of the 1319 children examined, 9·48 per cent. were classed as "bad," 45·72 per cent. as "medium," and 44·8, or less than half as "good." The state of nutrition was far from satisfactory, no fewer than 32·22 per cent. being

Classified as Thin

(the largest number being between the ages of six and nine); 50·34 per cent. as "medium"; and 17·44 per cent., or about one in every seventy-five, being regarded as "stout." As might have been expected, the 20·77 per cent. returned as "bad" in "brightness and alertness" were almost entirely drawn from amongst those classed as "bad" in health appearance and as "thin" in nutrition. The close connection between nourishment and mental activity is once more demonstrated, and the examiners agree that with improvement in general health and surroundings a corresponding improvement in brightness and alertness would follow.

Both body *cleanliness* and cleanliness of clothing were carefully inspected, and the result is deplorable in the extreme. Only 29.95 per cent. were returned as "good" for clothing, and 35·94 per cent. for body cleanliness. In both groups the girls were much worse than the boys. The "bads" included most of the cases of infectious skin diseases, enlarged glands and sore eyes. The use of the bath was discovered to be rare, except among some of the older boys, who receive swimming lessons. It is painfully evident, both to eye and nose, that the gospel of water, soap and towel needs the preaching of a Boanerges in the slums of our cities.

In estimating *weight*, comparison is made with children of Glasgow schools, with children attending Edinburgh

schools generally, and with the Anthropometric Committee's average age-weight standard. At all ages, the weights of both boys and girls of the selected school compared unfavourably with the Anthropometric Committee's standard, the difference being least marked at five years of age, and gradually increasing year by year. At five years of age the boy in the selected school weighs 2·16 pounds less than the average, and the girls 2·8 pounds. At thirteen years the boy weighs 10·99 pounds, and the girl 12·43 pounds less than the average. Up to five years of age the food supplied to the children is more nearly sufficient to enable them to reach the average, but as the child gets older, and growth increases without a proportionate increase in nourishment, the divergence from the standard becomes greater and greater. The comparison with the Glasgow school children is very favourable to the selected school at all ages, but a similar comparison with the children of a country school at Alloway in Ayrshire is markedly in favour of the rural school at all ages.

In the case of *height*, the children of the selected school fall below the Anthropometric Committee's standard at all ages. In boys at five years it is ·6 in., gradually increasing to 3·65 ins. at fourteen years, the corresponding figures for girls being ·98 in. at five years and 3·22 ins. at fourteen years. At all ages

GLASGOW CHILDREN ARE TALLER

than those of the selected school, and so are the children of Edinburgh schools generally. The Alloway children at all ages are much in advance.

The *chest measurements* recorded do not furnish much guidance to the ordinary lay reader, and the examination of the *teeth* need not detain us long. Out of 1318 children, only two habitually used a tooth brush once a day. Nearly two-thirds were classified as "medium" for cleanliness, which probably only indicates that teeth remain moderately clean in spite of inattention to their condition. As to *eye sight*, 10·44 per cent. suffered from some unhealthy condition of the eyes, or eyelids, the commonest being inflammation of the eyelids and conjunctiva. Forty-four cases of corneal nebulæ were found, and such eyes are permanently damaged in a greater or less degree. Sixty-one children suffered from squint. The test for acuteness of vision revealed 77·7 per cent. as normal, 9·3 per cent. as half-normal, and 12·87 per cent. as third-normal.

No less than 89·25 per cent. of the children had "good hearing" by the watch test, the remainder being defective in a greater degree. With the voice test 87·85 per cent. of the children could hear at 16 feet or more, and 5·89 per cent. were sufficiently defective to require attention. Altogether, 42·49 per cent. of the children were the victims of some unhealthy condition of the throat and nose, all of them probably requiring attention. Treatment, the examiners say, would much improve the fitness of the children for their school work. Of the 1319 children examined as to the state of the heart and circulation, sixty-one were found with either some functional or organic condition of the heart; the thirty-eight cases of functional disease were found to be equally spread over the ages of five to fourteen. The examiners remark that such disease is usually attributable to lack of adequate nurture. "Many of these children were insufficiently fed, and gave obvious evidence of parental neglect."

Of the 1319 children examined, 909, or

68·92 PER CENT. HAD UNHEALTHY SKINS.

"This high percentage is accounted for not so much by the number suffering from organic affections of the skin as by the inclusion of all cases that showed lesions of the skin due to bites of fleas and pediculi....Lack of bodily cleanliness and a want of attention to the condition of the children's clothing and hair are alone responsible for these conditions, and their entire eradication from the children in a school is not difficult to secure." Dr. Kerr's system, in practice in the London schools is highly recommended. As might be expected, the majority of the children suffering from pediculosis are girls.

(To be continued.)

At the request of a large number of readers, the Editor has decided to renew this feature of the magazine. All questions will be answered as soon as possible. but readers must remember that, owing to exigencies of printing, an immediate reply cannot always be assured.—THE EDITOR.

A. S. EZRA (CALCUTTA) writes me as follows: "A young friend of mine having a desire to embrace your system of physical culture, and being under parental control, requested me to approach his governor on the subject. After a quarter of an hour's foolish argument Mr. ——— came to the following conclusion: (1) Systematic exercises with light dumb-bells and developer are harmful, and on no account will he consent to it; (2) His son is at present in good health and does not need any exercise: (3) His son's emaciated figure with very prominent salt cellars are sure signs of long life: (4) that a leading medical man confirmed the above statements.

"I shall thank you to publish the above in your magazine of physical culture, at the same time giving your views on the subject."

[I do not know that I have ever heard such foolish arguments against physical culture, and I have heard a good many such. I do not know that it is even necessary for me to refute them, and anything I say thereon is prompted by my kindly wishes towards an unfortunate son of such a father, who in turn seems to be equally almost as unfortunte in having as a medical adviser a doctor who can permit or support such utterly ridiculous views. It may be that both the father and his doctor have very poor opinions of what constitutes good health and a sound and strong body. I imagine that both must themselves be acting on grounds similar to those of the fox who, having lost his tail, tried to induce other foxes to do without their tails also. In conclusion, I hope it will not be long before the son will be able to follow whatever healthy inclinations towards physical culture he may possess, or better still, that the father will see the unwisdom of his logic.

P.S.—Since dictating the above I have come across the following letter from Mr Repton, who reports particulars of his case which should serve as the most convincing proof of the value of physical culture, both to the unenlightened father and to his son's medical adviser. Mr. Repton (Hammersmith) says:—

"I write to you as the leading exponent of physical culture to thank you for what exercise has done for me. There was a time when I could only stand school for a few months at a time and sport of any kind was barred through my health. Many years ago my doctor's instructions were that I should leave my school for a year and be left to run wild and go my own way. I did! I gave up medicine, joined a gymnasium, bought an exercise and a pair of dumb-bells and also took to football.

"Now at the age of twenty-three I can lift my own weight above my head, am captain of the football club and Hon. Secretary of the gymnasium, and since that day have hardly known what it is to be ill. Wishing you and your magazine every success."

———

Weak Heart.

"Have you any suggestions to offer where a person's heart beats too hard and fast after

any excitement or exertion?" So asks X. of DUMFRIES.

[*Answer.*—These symptoms may be caused by simply weakness of the action of the heart. Nervous people, or anæmic people, or people who are weak from any cause, are subject to palpitation of the heart following any excitement or exertion. It may also indicate organic disease of the heart, although in organic disease of the heart the heart beats too heavily even when there is no excitement. I think yours is a case of sympathetic heart disturbance. Light daily exercise will strengthen the heart and remove the cause of disturbance.

Catarrh.

H. B. (LONDON, S.E.), writes as follows: "Please tell me in Answers to Correspondents how to permanently cure catarrh of long standing. I have had catarrh since I was fifteen. Should I be more moderate in eating, although I only eat fruit and cereals generally?"

[*Answer.*—Of the food taken into the body only a part is used by the body for its maintenance. The rest becomes waste. This poisonous waste, in addition to the waste resulting from broken down tissue, is to be excreted. For this excretion there are four organs, the skin, lungs, bowels and kidneys.

In the normal condition of the system the total waste matter, consisting of the waste of the food and the waste formed by the body itself, is continually being excreted by these four organs. This is health. Usually, however, the food eaten contains a much larger proportion of waste than it should. In fact, many palatable dishes consist largely of waste forming matter. Through the habit of improper breathing, and through the inactivity of the skin, constipation and the frequency of kidney troubles, the excreting organs, lungs, skin, bowels and kidneys, cannot carry off the waste matter taken into the body and made by it. Too much waste is taken in and made, and too little waste is carried out. There is thus an accumulation of this waste matter in the system. This retained matter is the cause of disease.

The accumulated matter may be deposited in any part of the body; and the specific disease resulting depends upon the location of the deposit and upon the manner in which the body tries to get rid of it. If by a spasmodic effort, as in typhoid fever, the condition is called an acute disease. If the gradually increasing deposit is accompanied by pain or by any serious discomfort, as in chronic rheumatism, the result is called a chronic disease.

Catarrah is simply the effort of the system to excrete the retained waste matter through the mucous membranes—what pathologists call "vicarious elimination." The rational treatment, then, for catarrh is to eat very little food, and that little of a kind that will digest readily and not form waste matter, and at the same time to so increase elimination that the organism will throw off the matter already retained. Free water drinking will increase the action of the skin, bowels and kidneys, and that is always indicated. The bowels should also be cleansed by daily enemas. The skin elimination should also be accelerated by free exercise and by sweat baths once, twice or three times a week. As to the lungs, their function should be increased by active out of door exercise and by the practice of breathing exercises.]

Youthful Nervousness.

Mrs. A. G. K. (HOVE) writes: "Will you kindly tell me what would be the best diet for a boy of eight and a half years, who is strong muscularly, who but seems very nervous and irritable? I have received many valuable suggestions from your writings."

[*Answer.*—The fact that the boy is nervous may be an indication that he is overfed. This, indeed, is the usual error in the feeding of children. I should suggest the following diet:—Breakfast, cereal with fruit juice or milk and bread; dinner, beef, fish or mutton, peas or beans, baked potatoes or boiled rice, salad, fruit, bread; supper, raw or stewed fruit, bread or cereal, with fruit juice or milk. Allow little or no fluid with the meals, but between meals, and on rising see that the child gets a great deal of water. Daily baths and out of door exercise are also necessary. A few weeks of this treatment will lead to radical improvement.]

THE PHYSICAL CULTURIST'S LIBRARY.

Any of these Books can be obtained direct and by return post from Our Readers' Library Department, Sandow's Magazine, 131, Temple Chambers, E.C.

HEALTH AND LONGEVITY..

By H. GAZE. Nothing is sweeter than life. Calamity, poverty and suffering do not dispel the desire to live. "The general adoption of the rules of living recommended in this book would go far, in a few generations, to eliminate disease, poverty, vice and crime." Price 5/6, postage 4d. extra.

THE MUSCLES AND HOW TO DEVELOP THEM.

By F. J. HARVEY. Price, 1s., post free, 1s. 2d. This little work contains over 70 illustrations, and may be described as "Every Man his own Instructor."

YOUR MESMERIC FORCES AND HOW TO DEVELOP THEM.

Giving Full and Comprehensive Instructions. How to Mesmerise. By FRANK H. RANDALL. Post Free 2/9. This book gives more real practical instruction than many so called Courses of Instruction advertised at ten times its cost.

INDIGESTION: Its Prevention and Cure.

By F. HERBERT ALDERSON, M.B. A handy book of reference to advice given in a physician's consulting-room. Advice as to Diet for Dyspeptics. Price, 1/2, post free.

DIET & HYGIENE For Infants.

By F. HERBERT ALDERSON, M.B. How to bring children up through the first year of life, and how to guard against infantile complaints, etc. Price, 1/2, post free.

GYMNASTIC EXERCISES (1076).

On Horizontal and Parallel Bars, Rings and Horse. By F. J. HARVEY. Price, 1s., post free, 1/2.

PHYSICAL CULTURE.

Scientific and Practical. By Prof. D. L. DOWD. 322 pages, with portrait of Author, and 80 illustrations. New and Revised Edition. Cloth, bevel edge, 6s.

ARS VIVENDI.

By ARTHUR LOVELL. Revised and enlarged edition; 145 pages, with index. Price 2s. net, post free, 2s. 3d. Contents: Preface—Introduction—Water, Light and Diet—Breathing—Physical Culture—Transference of Nerve, Energy and Suggestion—Mental Vigour—Power of Will—Imagination—Concentration—Manners—Vril and Individual Influence—Symbology of the Developed Man.

MENTAL DEPRESSION: its Causes and Treatment. By R. J. EBBARD.

This book will prove a boon and a blessing to all who are the victims of symptoms of Mental Depression, especially to those whose occupation is of a sedentary character, and who are therefore subject to Indigestion and Dyspepsia. Its style is clear, concise and free from the intricacies of pretentious and expensive works; moreover, its price places it within the reach of all. Price, 2/6, postage 3d. extra.

MEMORY.

By DATAS. A simple system of Memory Training; fully describes the methods used by "DATAS" to obtain the marvellous memory which has astonished audiences throughout the United Kingdom for the last two years. Interesting and instructive. Price, 1/2, post free.

MUSCLE PLATES.

By F. J. HARVEY. It would be difficult to speak too enthusiastically of this Anatomical Chart. All the exercises necessary to the acquisition of big strong muscles are illustrated in the most unmistakable manner. Price 1/-, post free, 1/2.

PERPETUAL HEALTH.

How to secure a new lease of Life by the Exercise of Will Power in following out the Combined "Cantani-Schroth" Cure. A new and Invaluable method of Treatment of Disease, enabling health to be restored quickly, even though undermined by Disorders of the gravest and most stubborn character, such as Gout, Rheumatism, Blood and Skin Diseases, etc., Without Physic. By P. M. HEUBENER and F. W. VOGT. Post free, 2/9.

THE ART OF BREATHING.

As applied to Physical Development with Respiratory Exercises for Adults and Children. Compiled by SURGEON-CAPTAIN HOPER-DIXON, R.A.M.C. Price, 1/1½, post free, This book which can be regarded as one of the Physical Culture Classics has been revised and enlarged under the direction of Mr. T. CHESTERTON; it is more fully illustrated.

HEALTH BUILDING; OR, HEALTH WITHOUT FADS.

By JOSEPH RALPH. Being a Working Outline of the Principles Involved in Health Building; also a little Cursory Dissertation on some Current Falacies. Price, 1/2, post free.

Digitized by Google

USEFUL BOOKS for our LADY READERS.

Tokology. A Book for Every Woman.

By ALICE B. STOCKHAM, M.D.

The Author, in sympathy with the needs of her sex, discusses at length, with strength and purity, physical questions of the greatest importance.

Dr. Stockham has received thousands of letters *filled with expressions of deepest love and gratitude* to her for giving to the world such *a grand book.*

Price, **8/-** Postage 6d. extra.

Koradine Letters.

By ALICE B. STOCKHAM, M.D., and LIDA HOOD TALBOT.

A fascinating story which gradually, in a most spontaneous and natural way, through a young girl's own correspondence, illustrates life's unfoldment; at the same time it develops a philosophy of life and teaches that bodily health is possible to all.

Price, **5/-** net. Postage 4d. extra. Foreign Postage 8d. extra.

My Lady Beautiful,

Or The Perfection of Womanhood.

By ALICE M. LONG.

"There never was a woman who did not want to be beautiful, or to preserve her beauty if Nature has endowed her with it; therefore this book appeals to an enormous class. It is safe to say that both these classes will find in this book the key to perfect, winsome womanhood. Do not expect to find in it receipts for cosmetics and washes, those baneful substances which are destructive of true beauty, for you will be disappointed; but in their stead you will find golden advice which cannot fail of producing the desired result if conscientiously followed."

208 pages, 26 beautiful illustrations from living subjects. A charming gift from either lady or gentleman to a friend.

Price, **5/-** net. Postage 4d. extra.

Apply Library Dept., Sandow's Magazine, 131, Temple Chambers, E.C.

Do you desire a Soft Healthy Skin?

Many athletes are noted for the beautiful soft appearance of their skins; this is mostly brought about by careful massage; nothing is better for this purpose than a pair of

HAIR FRICTION GLOVES

used after exercise or the bath.

Send for a Pair. Price 4/6 post free.

To **SANDOW'S MAGAZINE**
(Appliances Dept.),
131, Temple Chambers, London, E.C.

WOODEN DUMB-BELLS Made of best hard birch Polished, most suitable for Light Exercises or Schools.

½ lb. per pair, 10d.; 1 lb. per pair, 1/3;
2 lb. per pair, 1/9, postage extra.
Special quotation to Gymnasiums and Schools.

IRON DUMB-BELLS Made on approved models, well balanced and finished, 2d. per lb., postage extra.

SANDOW'S MAGAZINE CO.,
131, Temple Chambers, London, E.C.

Amusements.

THEATRES.

APOLLO—At 8, "The Dairymaids." Mat. Sat. at 2.

ALDWYCH—At 8, "The Beauty of Bath." Mat. Sat. at 2.

COMEDY—At 8.30, "Raffles." Mat. Sat. at 2.30.

DRURY LANE—At 7.45, "The Bondman," by Hall Caine. Mat. Wed. and Sat. at 2.

PRINCE OF WALES'—At 8.15, "See-See." Mat. Wed. at 2.15.

ST. JAMES'—At 8.15, "His House in Order." Mat. Wed. at 2.

VAUDEVILLE—At 8, "The Belle of Mayfair." Mat. Wed. and Sat. at 2.15.

NEW THEATRE—At 8.30, "Amasis." Mat. every Sat. at 2.30.

HIS MAJESTY'S—At 8, "King Richard II." Mat. Sat. at 2.15.

ADELPHI—At 8.30, "The Virgin Goddess." Mat. Wed. and Sat.

GARRICK—At 8.30, "The Morals of Marcus." Mat. Wed. and Sat. at 2.30.

DUKE OF YORK'S—At 8.45, "Toddles." Mat. Thursday at 2.

VARIETY THEATRES.

ALHAMBRA—At 7.45, "L'Amour" and Varieties.

EMPIRE—At 8, "The Debutante."

LONDON HIPPODROME—At 2 & 8, "The Earthquake," Lavater Lee, O. K. Sato, etc.

LONDON PAVILION—At 7.30, Mat. Sat. at 2.15. Marie Dainton, Malcolm Scott, Hill & Whitaker, etc.

OXFORD—At 7.30. Mat. Sat. at 2.30. Marie Lloyd, T. E. Dunville, Kelly & Gillette, etc.

PALACE—At 7.45. Mat. Sat. at 2. "Galatea," Malcolm Scott, Margaret Cooper, Palace Girls, etc.

TIVOLI—At 7.30. Mat. Sat. at 2.15. Harry Fragson, Little Tich, Ada Colley, etc.

USEFUL BOOKS.

BEAUTY—How to obtain and keep it, by Mrs. H. B. Horton
PHRENOLOGY, by Prof. A. Johnson
HOW TO READ THE FACE, by R. Dinsdale Stocker
HYPNOTISM AND ANIMAL MAGNETISM, by A. C. Maxfield
CRYSTAL GAZING AND WILL POWER, by Dinsdale Stocker
POPULAR SPIRITUALISM, by Mrs. H. B. Horton
MOLES AND BIRTHMARKS, by Dinsdale Stocker

Price 3d. each, post free, from

SANDOW'S MAGAZINE (Book Dpt.), 131, Temple Chambers.

Digitized by Google

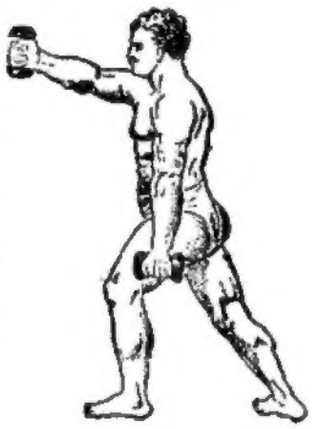
Sandow Specialities

—— FOR ——

Physical Culturists.

MODERN LIFE MAKES SOME FORM OF PHYSICAL EXERCISE A NECESSITY.

SPRING-GRIP DUMB-BELLS



It is well known to the Medical Profession, and practically proved by carefully conducted experiments, that if you **concentrate** your **will power** on a muscle, the blood flows to this particular muscle in larger quantities than usual. The muscle building substance is carried by the blood, therefore the concentration means rapid development of that muscle.

The will power is kept alive during the whole exercise with Sandow's Grip Dumb bells, by the constant necessity of compressing the springs. The ordinary Dumb-bell is only a dead weight to lift and move about, no more.

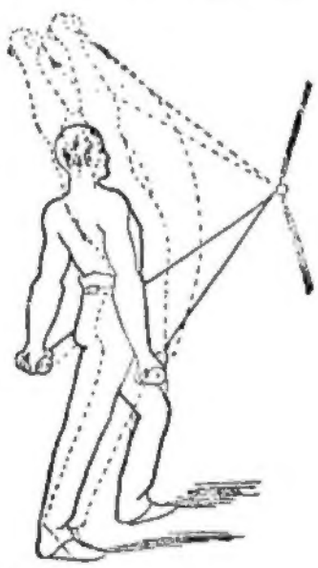
PRICES, 12/6 (Nickelled, 7 springs), 7/6 (Enamelled, 5 springs), 5/- Child's (2 springs). *Postage 6d. extra.*

CONCENTRATED EMBROCATION

PRICE 2/9 per Tube, post free.

In the production of this embrocation the materials used are entirely vegetable and are so blended that not only is it **very strong**, but rapid in its action and only occupies a small bulk. The majority of embrocations are simply lubricating oils used as an adjunct to massage. **Sandow's Concentrated Embrocation** is an emollient which, from its inherent properties, acts favourably on the structures massaged.

SANDOW'S DEVELOPER



PRICE 12/6, postage 8d. extra.

This contrivance has attained such world-wide reputation that a description of it is almost superfluous. It consists of a combination of rubber cords and dumb-bell attachments, and its ingenious construction allows of its being used as:—**A Wall Exerciser, Heavy Weight-Lifting Machine, Chest Expander,** or for **Light Dumb-bell Exercises.** A complete set of charts is supplied with each machine.

Apply SANDOW'S MAGAZINE (Appliances Dept.), 131, Temple Chambers, London, E.C.

Digitized by Google

Specially introduced at the request of the Medical Faculty.

Fry's MALTED COCOA.

A Combination of FRY'S Pure Cocoa and ALLEN & HANBURYS' Extract of Malt.

THE value of Extract of Malt as a nutritive and restorative agent for delicate and exhausted constitutions is now fully acknowledged by the Profession, the extract being rich in muscle and fat-forming elements. It promotes, moreover, in a special and peculiar manner, the solution and digestion of all farinaceous foods, and is therefore a valuable remedy in those diseases which arise from an imperfect assimilation of these substances. The presence of the active and valuable constituents of the Malt, unimpaired and in a concentrated form, is secured in ALLEN & HANBURY'S Extract by a very careful selection of the Malt used, and the greatest attention to the temperatures at which the processes of the mashing and subsequent evaporation *in vacuo* are carried out.

An ordinary portion contains more of the active properties of Malt than a pint of the best ale or porter.

The combination, therefore, of ALLEN & HANBURY'S Extract of Malt with FRY'S Pure Cocoa Extract supplies to invalids and all those possessed of weak digestive powers a delicious, refreshing, and invigorating beverage for breakfast, luncheon or supper.

Both of its constituents being highly concentrated, the MALTED COCOA is economical in use, and possesses highly nutritive properties, and on this account can be recommended with great confidence to the public.

THE OLDEST HOUSE IN THE TRADE. ESTABLISHED 1721.

REDUCED SIZE.

How Embrocation aids Athletes.

Athletes *must* possess sound constitutions, perfect health, and strong supple muscles. Proper diet and systematic exercise will give the two former. **Sandow's Concentrated Embrocation** ensures the last—but not least. The importance of a really efficient Embrocation to Athletes in training is often overlooked and hardly ever used except in the case of a strain or sprain.

This is a great mistake. Embrocation should always be used *before* exercise, as massage with a good Embrocation enables the muscles to do more work with less fatigue; *after* exercise it relieves fatigue and brings comfort to the tired muscles.

Sandow's Concentrated Embrocation

does this, does it effectually and does it always. Regular use of this Embrocation brings and keeps the muscles in perfect condition, relieves muscular stiffness, and heals sprains, strains, bruises, or injured joints.

For **Rheumatism, Sciatica, Lumbago, Neuralgia, Colds, Sore Throat, etc.,** it is an unsurpassed remedy. It has cured Rheumatism of over 14 years' standing.

It is highly concentrated and thus rapid and certain in result. It cannot be spilt, is easily and exactly applied, and waste is impossible. It is convenient to carry, for there is nothing to break.

A 32-page booklet, with photographic illustrations showing the correct method of application for each of its many purposes, is presented with each tube.

Sold by all Chemists, Stores and Athletic Outfitters at 2s. 9d. per tube, or post free on receipt of a Postal Order for this amount direct from—

SANDOW'S EMBROCATION CO., Sandow Hall, Victoria Embankment, London, W.C.

Printed by THE ROBINSON PRINTING COMPANY, LTD., 1, Lombard Court, E.C., and Published by the Proprietors, at 131, Temple Chambers, London, E.C.

Digitized by Google